TRAVELS

IN

VARIOUS COUNTRIES

OF

EUROPE ASIA AND AFRICA

BY

EDWARD DANIEL CLARKE, LL.D.



SECTION THE SECOND

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ADVERTISEMENT

RELATING TO

THE CONCLUDING VOLUME

OF

DR. CLARKE'S TRAVELS.

It has not been permitted by Providence, that Dr. CLARKE should close with his own hand the series of Volumes containing the Narrative of his Travels. This estimable and gifted man expired, after an indisposition of some continuance, but from which no fatal termination was at first apprehended, on the ninth of March 1822.

The sorrow occasioned by this melancholy event, to those numerous friends to whom the kindness of his nature and the many excellent qualities of his heart had long endeared him, has been equalled by the regret universally expressed for the loss of one who had established so many and strong claims on public esteem and admiration. But the confined space, which could be here allowed, would not admit of a complete delineation of the several features of his distinguished character: that task must be left to other hands; and, it is vol. vi.

ADVERTISEMENT.

hoped, will be shortly accomplished, in a manner worthy of the subject, and satisfactory to the Public.*

The appearance of this concluding Volume was unavoidably delayed during the life-time of Dr. CLARKE, by the necessity, under which he was placed, of attending to the duties of his public situation in the University of Cambridge; and, latterly, by the increasing severity of his bodily indisposition. After his decease, those of his friends, to whom his Journals and Papers were entrusted, examined them, for the purpose of ascertaining whether the materials they contained were of such a nature as to allow them to proceed in the continuation of the Work. On finding them sufficiently copious, they thought themselves justified in completing the Volume. Twelve Chapters had been prepared for the press by the Author himself, and printed under his direction: the rest have been composed from the observations contained in his Manuscript Journals, which have been strictly adhered to, with a few exceptions: and in the parts where they were deficient, some assistance has been derived from the remarks found also among his papers, which had been communicated to him by friends who had visited the North of Europe.

It appears, from the documents found among his Manuscript Papers, that he intended, in the Preface to this concluding Volume, to refer to the numerous testimonies

of

^{*} See the annexed Proposals for publishing the Life and Remains of the Author.

manners and character which he gave in his First Volume. It appears, too, that he had received a variety of private Letters from persons who had visited Russia, amply confirming the general truth of his statements. As the Author did not live to produce these testimonies himself, in the manner he had proposed, it has been thought most consistent with propriety to abstain here from all discussion of the subject. Already, the Public have full means before them of judging of the correctness of his representations: and no person who has the most remote knowledge of his character, will ever suppose that he was, on any occasion, or in the smallest circumstance, guilty of wilful misrepresentation, or that he wrote from any other feeling than a sincere conviction of the truth of what he affirmed.

In consequence of the general approbation bestowed on the First Volume, Dr. Clarke was encouraged to give his utmost attention to the succeeding Parts; in the hope of making them worthy of the favour with which his Work had been received. He was aware, that, in conformity with his original plan, it would be extended to some length: and therefore, in preparing the different Volumes for the Public, he remitted nothing of that care and research which he had employed in the composition of the First. By the new and interesting information which he had collected, he was enabled to throw great light on the Natural History, the state of Society, the habits and condition of the People of Countries which had not been recently visited: and in his remarks

remarks relating to other parts more frequently examined, he spared no labour to illustrate the narratives of those who had preceded him; to supply their deficiencies; and to suggest subjects of useful inquiry to the Travellers who may follow his steps. In the present Volume, there is the same endeavour to interest the Reader in the subject before him—the same power of description—the same life in the delineations of character and manners, which particularly distinguish the former Parts. In delivering it to the Public, the friends of Dr. Clarke beg leave to bespeak an indulgent consideration of those Chapters which were not prepared for publication by the Author's own hand. Respecting the rest, they feel no apprehension: they anticipate, with confidence, that it will be found to make an important addition to a Work which reflects the highest credit on its author; whether it be considered with reference to the quantity and value of the materials collected,—the industry and care displayed in the arrangement of them,—or the spirit and animation which pervade the whole.

proposals

FOR PUBLISHING, BY SUBSCRIPTION,

THE LIFE AND REMAINS

OF THE

REV. EDWARD DANIEL CLARKE, LL.D.

PROFESSOR OF MINERALOGY IN THE UNIVERSITY OF CAMBRIDGE.

In One Volume Quarto, Price £3.3s.

THE MS. REMAINS of this eminent and lamented Individual consist of Journals, (wholly unconnected with those already published,) written during his Travels to different Countries; also of numerous Letters to his private Friends, and to Travellers and Learned Men; of Discourses prepared for public and other occasions, and detached Papers on different subjects.

A SELECTION of such of these REMAINS as may appear fit to meet the public eye, will be made by some of the intimate Friends of the Deceased. They will be incorporated with the Life, or printed in an Appendix to it, as may seem most expedient.

The Profits of the Work will be exclusively applied to the purpose of educating and providing for his Family.



The following Friends of the Deceased have undertaken to form a Committee for the purpose of procuring Subscriptions.

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OF

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CHRISTIANIA.

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CHAP. I. WE had now traversed nearly the whole of Norway, from the North to the South; but had seen nothing of its western province of Bergen, nor of the city of that name. Yet this being the most populous town of the whole country, we were desirous of obtaining from the inhabitants some information respecting its present state; and for this purpose we introduced the subject in our first conversation with Mr. Anker; telling him that the people of Trönyem seemed almost as ignorant as we were, of every thing relating to Bergen. "It is precisely the same with us in Christiania," said he: "Bergen is less known to the inhabitants of this place than London or Paris: in fact, we hardly consider it as forming a part of our country; or as inhabited by Norwegians. The people of Bergen are, for the most part, foreigners, principally from Holland; persons who have settled there for trade; buying and selling the fish taken by the natives of the northern parts of Norway." We soon forgot Bergen, and turned our inquiries towards Christiania, whose respect to the representative we thought we beheld in this high-spirited and intelligent man. He had travelled much, and combined, in his manners, all the best characteristics of our own countrymen, with a good deal of French foppery, and that native heartiness of a Norwegian, which knows no bounds to its hospitality, but, as in Sweden, will carry its kind attention to stangers even to excess. It seemed, in this short interview,

Situation of Bergen with rest of Norway.



as if his whole property were to be at our disposal. CHAP. I. "My carriages and horses, Gentlemen, are at your service so long as you choose to remain with us. Our good friends here, Mr. Kent and Mr. Jarret, will tell you, that our parties in Christiania are pretty well attended: there is nothing stiff or formal in them: we meet, chat, play at cards, smoke, sing, and drink Burgundy-bishop: every one comes and goes as he likes. You will be expected this evening at the Governor's: his Lady is a very pleasing woman. If you go to his house, I shall have the honour of introducing you to several families, and of taking you afterwards with me to a rout, where you may amuse yourselves after your fatigues. To-morrow, Mr. John Collet will expect you to dine at his house: there you will meet many of the inhabitants of this place; and, among others, Dr. Müller, a man of letters, who married an English Lady." Being Chamberlain to the King of DENMARK, Bernard Anker wore the Danish court badge,-a large key and riband, fastened to the button of his coat behind. In his person, he was above the common size, of athletic form, and well-looking. His hair, decorated in the old Parisian taste, was highly frizzled and powdered: and, during the whole of his conversation, he stood opposite a large mirror, attentively surveying and adjusting the different articles of his dress: but in all this there was nothing of mere vanity, or of affectation; it was evidently what, among the French, would have been once considered the ease and gaiety of a well-bred fashionable beau; although, to English eyes, such an air and manner might have been considered as bordering upon those of the petit-maître. However, we soon found, in the conduct of this exemplary individual.

CHAP. L.

individual, a lesson against judging too hastily from outward appearances. His heart was possessed by the best qualifications of human nature; and his mind, well stored with intelligence, and full of resources, poured forth, in every conversation, such general knowledge of the world, and of the springs of human actions, whether in court cabinets or in private life, as made all who became acquainted with him eager to join his company'. His character is so intimately connected with the history of Christiania, and of Norway, that no traveller, who has published an account of the country, during his life-time, has neglected to attend to it. The noble use he made of his princely income, and of all his vast means of doing good, in the encouragement he gave to every measure likely to promote the interests of the nation; the example he set to those around him, of domestic economy, and of social order; the public donations he made,—in all of which he was aided by a corresponding disposition in the benevolent conduct of his brother,—have caused the names of Bernard and of Peter Anker to live in the recollection of the Norwegians, associated with all that is praise-worthy among theme; -as "rich men, furnished with ability, living peaceably

Bernard and Peter Anker.

^{(1) &}quot;His talents were frequently exercised, and his great wealth employed, in acts of beneficence to his fellow-citizens. He presented the Military Institution at Christiania with a spacious house, and increased their funds by a donation of five thousand dollars. The needy never surd to him in vain; and, as his liberality was unbounded, the inferior classes looked up to him with confidence for protection and support. * * * Like the illustrious Lorenzo de Medicis, he was a great merchant, and capable of being a eat statesman: he entertained an ambassador with as much ease as he would a factor." See Wolff's Northern Tour, pp. 99, 100. Lond. 1814.

^{(2) &}quot;It is highly gratifying to read, that when the *Island of Zealand* was invaded, and taken possession of by a *British* army in 1807, and a country-seat belonging to the Hon.

peaceably in their habitations; honoured in their generations; CHAP. I. the glory of their times." When we find it written in Sacred Scripture, that "a merchant shall hardly keep himself from doing wrong," be it always remembered, that the Ankers were of this class in society. "In the waves of the sea, and in all the earth, and in every people and nation, they had gathered to themselves a possession;"-and the secret of their prosperity was divulged in the cheerful countenances of their tenants and dependants; in the comfort and the gladness which they so largely diffused; but especially throughout all the dwellings of the poor.

In the evening we visited the Governor, and found an visit to the assembly, consisting of some of the principal people of the city. The gentlemen were engaged playing whist, with enormous tobacco-pipes of Meerschaum in their mouths, Barbarisms. smoking in the presence of the women, and spitting upon the floor. In this respect the inhabitants of Tröngem were more polite; as they neither smoke nor spit when ladies are present. The Governor told us he usually smoked about twenty pipes a day. But there is another custom, prevalent throughout Norway and Denmark, and some other parts of the continent, which in our country would be deemed almost too low for an alehouse: it is that of marking. the points of a game at cards with chalk upon the table. A piece of chalk was laid for this purpose upon every cardtable at the Governor's, and used both by ladies and

gentlemen:

Hon. Carsten Anker was entered by a detachment of the Guards, such was the respect shewn by our troops to its hospitable owner, that his mansion remained unmolested during the whole time they remained in its vicinity." Ibid. p. 175.

CHAP. I. gentlemen: the same practice is said to exist even at the Danish Court. These are trifling barbarisms; but they are nevertheless barbarous; and must be viewed, in any country, as among the marks of a want of refinement: they tell us, at a glance, of the state of the society in which these indications appear. A German lady spits upon the floor of her apartment, even when it is covered by an expensive carpet; and may attempt to justify such a breach of good manners. by urging that it is a practice tolerated even at court. English Peers, and English dandies, aping foreign customs, have sometimes imitated such examples; but nothing can reconcile them to the canons of civilization'.

A Rout.

From the Governor's we went to a rout and supper, at which was convened all the beau-monde of Christiania. The rooms were crowded with a variety of company; among which we observed several officers of the army and navy, and a number of beautiful women in elegant and fashionable dresses, exhibiting the latest modes of London. evening parties, being held in routine at the different houses, had become so expensive, that Mr. Anker, and others, prevailed upon seventy of the principal inhabitants to consent to an agreement, which they all signed, that certain rules of economy should be observed;—that no person should be

at

⁽¹⁾ The habits of the French women are in this respect abominable. "Some of their habits," says Henry Matthews, in his most interesting Volume of Travels, "must be condemned as shockingly offensive.-What shall we say of the spitting about the floor, which is the common practice of women as well as men, at all times and seasons, not maky in domestic life, but also upon the stage, in the characters of heroes and nervines, even in high imperial tragedy?"-See the Diary of an Invalid, &c. by Henry Matthews, Esq. A.M. Fellow of King's College, Cambridge, p. 425. Lond. 1820. Second Edition.

at liberty to exceed the stipulations made for every evening's CHAP. I. entertainment;—that only a certain number of lustres should be allowed in each apartment, and that the number of wax-candles should be limited for each lustre;—that, instead of an expensive supper, a small collation should be prepared, to which the guests might go, without requiring any person to wait upon them. These new regulations explained to us the meaning of a sight which would otherwise have appeared remarkable; namely, a number of large chandeliers and sconces, which, in the different apartments, were all filled with wax-candles, but not lighted. Our reception was, as usual, of the most hospitable nature: but in Christiania a welcome had been prepared for us, by the previous intercession of our two friends, Malthus and Otter, who had visited this place before our coming: and it was heightened by the kind offices of the two English travellers to whom we had been introduced in the moment of our arrival, Messrs. Kent and Jarret. With these gentlemen we soon became intimate: their amiable qualities had already rendered them popular among the inhabitants, and we found great advantage in their society. The dancing began with the waltz, soon after nine o'clock; but the company had been coming in since six, and formed really a brilliant assemblage, particularly the ladies: there were full as many handsome women, in proportion to the number, as would be seen at an assembly in England. Indeed, to English eyes, there was nothing foreign in the appearance of the company: the manners, abating only the smoking and spitting, were those of our own country; and we found the English language very generally understood.

From

Army Regulations.

From the Governor and Mr. Anker we learned that a change had just taken place in the laws relating to the enrolment of the peasants for the army. Every man in Denmark and Norway, born of a farmer or labourer, is a soldier. Those born of sailors, are sailors. Formerly, the officer of the district might take them at any age he pleased; Laws respect- before those that were younger. After being thus taken,

ing Marriage.

and he generally preferred a man from twenty-five to thirty, the man could not marry without producing a certificate, signed by the minister of the parish, that he had substance enough to support a wife and family; and even then it was at the will of the officer to let him marry, or not. This, and the uncertainty in respect to the time of being taken, had hitherto operated as a strong preventive check to population in Norway; and accounts for its increasing so slowly, although the people live so long. No man could consider himself as perfectly free to marry, unless he had solid possessions, till he had served his time; which, from being taken sometimes at thirty, might not happen until he was forty years old. We took some pains to inquire, whether the certificate of having enough to support a family were a civil or a military institution. From what we could learn, it appeared to be entirely military; and to have arisen from the fear, that the children of soldiers might fall upon the public, or starve. It had however, without doubt, a very strong influence, in a civil point of view; and was, in fact, the cause why the lower classes of people in Norway were in a much better state than could be expected from the barrenness of the country. These laws were now at an end. The liberty of marriage was allowed, without any certificate

certificate or permission of the officer. All the young men CHAP. L. of twenty were taken first; and if the number were not sufficient, all of twenty-two, and so on, were added;—it being no longer at the option of the officer to select the men at what age he might think proper. Formerly, any person under thirty-six might be taken; and the older were generally taken first. One proof that the certificate was entirely a military institution, is this; that a peasant, before he was taken, might marry without a certificate: but then he exposed his wife and family to the danger of being starved, if he were taken, unless he could leave behind him a sufficiency for their support; and it was probable that parents would not allow their daughters to marry without some prospect of this kind. The Governor disapproved of the new regulations: he said that the peasants would now marry without any prospect of being able to maintain a family; and the consequence would be, that more would be born than the country could support. He said that the old laws on the subject had lately been very loosely enforced: the effect of which was, an evident deterioration in the morals of the people. Many children died before they attained the fifth year of their age. He thought that the age of twenty, although well suited to such a country as France, was too young for a Norwegian; because the northern peasant is much later in attaining maturity. All males born in the districts along the coasts of Norway, and all in the inland towns who get their living by fishing, are enrolled as sailors; but all born in the inland districts of the country, who subsist by other pursuits, are soldiers. Those born of

CHAP. I. tradespeople in the towns are free; except with regard to the services they are obliged to perform as burghers.

Climate.

Speaking of the climate, the Governor said, that they had "huit mois d'hiver, et quatre mois de mauvais temps." We had heard the same observation made at Copenhagen; but, judging from what we had seen ourselves, we certainly should not have made the same remark. He said, that during the whole summer he had been only four days without his great coat. A reference to the account we have regularly kept of the state of the thermometer will best shew what the temperature of the climate really is.

Nobility.

With Mr. B. Anker we had a long conversation on the subject of the nobility. He said, that some time ago a proclamation had been issued by the Court of Copenhagen, that all persons claiming the rank of nobility should prove their just title to that rank by regular descent. Mr. Anker proved his descent from a noble Swedish family; but they made some difficulty in granting to him the arms of that family, as he had not himself a title, and the arms interfered with some of the Danish titles. However, he gained his point at last, and obtained the coat of arms. About three years since, without making any application, he received the key of Chamberlain, which gave him the highest rank in Torway, even above that of the Governor. His brother, Mr. Peter Anker, had the rank of General, wore a General's uniform, and was Intendant General of the roads in Norway. There are but two titled estates in all Norway; but there are many other estates that have privileges of nobility attached to them. Any person nobly born may purchase any of these

estates,

estates, and possess all the privileges belonging to them; but CHAP. I. a person not nobly born cannot purchase them. A commission from the King confers the same privilege as noble birth. An Ensign might purchase a nobleman's estate, and possess all the rights and honours attached to it. All civil offices, as in Russia, have a certain military rank. The title of Count gives a certain rank in the army; but a simple Ensign takes the precedence of a nobleman born, with the largest possessions, if he have no title, and hold no civil office from the crown. In a scale of the different gradations of rank shewn to us, we observed that it consisted of six or seven different classes. The rank of Chamberlain was in the same class with that of the Major Generals of the army, but it was at the head of this class. In the class above this, were the Generals, Admirals, and Counts possessing estates annexed to their titles; those without, being in the class below.

During this conversation with Mr. Anker, the character Character of of the Prince was started. Mr. Anker observed, that his deric. character was not well known, and seldom justly appreciated. He believed him to be the most moral man that could well exist, and of the most strict and impartial justice. He was not indeed generous; but this could hardly be attributed to him as a fault, arising, as it did, from the very small sum which he required for his own expenses; not more than 12,000 dollars:

⁽¹⁾ Now Frederic VI. King of Denmark, born January 27, 1768; married in 1790 to Princess Sophia Frederica of Hesse Cassel; by whom he hath issue two daughters.

CHAP. L.

dollars; a little above 2000l. a year. He never would confer the title of nobility, and was always extremely cautious in granting any office or favour of any kind. His fear of being partial sometimes carried him too far, and prevented his granting any thing, even to a person whom he might consider as worthy of his acquiescence. He was very silent in company, and partly, as Mr. Anker believed, from the fear of having some proposition made to him, or some favour asked. If a man had once made a request of this nature, the Prince seldom spoke to him afterwards, although he might still consider him as an object of regard. At Copenhagen he is unpopular; because the people about the court are all poor, and all beggars. Mr. Anker seemed to think that he had good natural talents, and a good memory; but that his education had been much neglected, of which he was fully sensible, and sometimes complained of it himself. Unfortunately, he was not fond of reading, which prevented him from repairing what was deficient. He has had no favourite whatsoever. Count Bernstoff, who had been erroneously considered as a favourite, possessed no particular influence. He was only Secretary of State, and not of the Grand Council; and ought by no means to have been considered as the Prime Minister. The liberality of the Prince in his ad ninistration of government, and his contempt for libels, proceeded from a right principle, and from a consciousness of the rectitude of his conduct; added, perhaps, to a sage foresight, which has always convinced him that the wisest and safest plan, in all such cases, is to let these things alone. A libel had been prosecuted by one of the courts but a short time before;

and the consequence was, that the book, which had been CHAP. L before neglected, rose into notice, and sold in the most rapid manner; three or four editions of it being successively published.

A young officer entered into conversation with us, who state of the spoke English remarkably well. He seemed not much to like the army; mentioned the brutality, and want of education in the greater part of his companions; and expatiated with much feeling upon the starving condition of the inferior officers, and their forlorn hope of promotion. All officers, except for some particular merit during actual service, rise by seniority; which makes promotion, during peace, extremely slow. An education during four years, at least, at the military academy either of Copenhagen or of Christiania, is requisite to the obtaining of a commission; and afterwards, those who are not noble often serve for some years as non-commissioned officers, before they can hold a commission. He said there was hardly a captain in his regiment that was under sixty years old; and seemed to think that the Prince, with all his attention to the army, had not done much to increase the comforts of the soldiers and officers.

The next day, October the fifteenth, we called upon Mr. B. Anker, and saw his magnificent house. We found him in his morning-gown, sitting in his study, surrounded by books and papers. He related to us the difficulties he had encountered, during his applications to the Court of Denmark, to obtain a University for Norway; and he began to be aware that it was a measure to which the Danish Government would

would never accede. He was not even allowed to purchase libraries for the public use of the *Norwegians* in their own country. A *Danish* party exists in *Christiania*, which is also violent against the establishment of a University in *Norway*.

Danish Policy with regard to *Norway*.

The Danish policy is, to compel all the young students to resort to Copenhagen, and there to spend their money; whence they generally return injured in their principles and in their health'. Mr. Anker had visited almost all the more civilized parts of Europe, and spoke foreign languages with great fluency. He was well read in the fine arts, and had formed a valuable collection of books and pictures. Among the most valuable of the latter, we were shewn some designs by Le Brun, and some remarkable proofs of the laborious exactness and minuteness of execution characteristic of the Flemish school, in a series of pen-drawings done by Orlacht of Anvers in 1761. In Mr. Anker's library, public lectures were delivered to the young Norwegians by himself and others. The following words were inscribed in large letters over the door of this apartment: DOCENDO DISCIMUS. Here we saw a complete apparatus for philosophical and mechanical purposes, the work of Nairne and Blunt of London: astronomical instruments, globes, and a museum of antiquities, and of natural history, containing minerals, shells, &c. "I must send to England," said he, "for almost every thing:

^{(1) &}quot;It was a line of policy which did not extend only to the students of *Norway*: all persons who had money to spend were thus allured to the capital; and although no one better understood, than *Bernard Anker*, the nature and ends of the decoy, yet he himself ended with falling into it." See *Wolff's Northern Tour*, p. 100, *Lond*. 1814.

thing: all the linen of my family is sent annually to London CHAP. I. And when we observed that the stock of to be washed." linen must be very large to admit of such an arrangement, he added, "that it was absolutely necessary to have a large Domestic stock of every thing in Norway, and each man must keep it Christiania within his own stores." "We cannot," said he, "go to market, or to shops, as you do in English towns: here, those who would live handsomely must collect into their own warehouses, from all parts of the world, whatsoever they may have occasion for, from the flour of which they make their bread, to the beef, the pork, the poultry, and all the stores necessary for a whole year's consumption." This makes living in Norway perhaps more expensive than in any other part of Europe. Mr. Anker told us, that he had thirty servants upon his own establishment, and that his brother

kept sixty. The fuel consumed upon his premises, for the number of different stoves, amounted to above four times as much as a nobleman's family would consume in Copenhagen: and we were rather surprised to hear him say that fire-wood was an expensive article, in such a region of timber. But horses constitute the article of heaviest expenditure to a gentleman in Norway, owing to the general high price of hay, which had been particularly scarce during the last spring. The

common price of hay averaged about five pounds a ton; this year the price had been doubled; and indeed it could hardly be had for money. Mr. Anker's stud amounted to twenty horses for pleasure, besides draught-horses; and he had eight or ten carriages. The great preparation for the year's consumption in Christiania, as in all the rest of Norway,

is made in the autumn. The season of slaughter, for the supply of the whole winter, takes place in the month of October; and the number of cattle killed upon this occasion is astonishing. The smallest and most private families salt a certain quantity; but in the larger houses it is a work of peculiar exertion, especially for the mistress. To become a good Norwegian wife, a lady must absolutely be educated in Norway. The mistress of each family presides over all the autumnal hoarding of provisions, and in person directs every operation. In one morning that we called upon Mr. Anker, eighteen bullocks had been slaughtered, and his stock was not by any means complete. Some of the meat is pickled; the rest dried. The fat is melted into tallow, and nothing wasted. Even the blood is saved.

Hospitable Entertainment. We went, by invitation, to dine with another merchant, Mr. John Collet, at his country-seat; having brought to him letters of recommendation: and in writing an account of Norway, however trivial the description of a dinner may be in general, we should indeed be guilty of an omission, if we neglected to describe the sort of reception which we experienced beneath his hospitable roof. He had a very extensive farm to manage; holding nearly 400 acres of land in his own hands. He treated rye in the same manner that v: do wheat; preparing the land for it by two or three other crops successively, so as to get a good crop of rye on the same land once in three or four years. His cows were fed, in winter, on turnips and carrots, preserved in cellars. Potatoes thrive remarkably well: they were introduced into Norway about thirty years ago, and were daily coming more into

use. The price of labour, he told us, was one shilling in CHAP. I. summer, and ten shillings in winter, without victuals. His wife, a very agreeable woman, was reckoned a pattern for all the wives in Norway. We found a very large party already assembled at Mr. Collet's house, and, among them, Mr. Anker, and our friends Messrs. Kent and Jarret. we were introduced to Dr. Müller, a very intelligent physician, and a great mineralogist, who sate by us during dinner, and was very communicative upon all subjects relating to the country: he had married the sister of an English physician, and spoke the English language with great fluency. Such was the magnificence of the feast to which we had been invited, that it would hardly be possible for our own Sovereign to afford a more sumptuous entertainment. We had every delicacy of the country, and all the wines of Europe, together with every species of costly liqueur and confectionary; -- yet every article had been brought forth from the storehouses of the family. A favourite beverage, called Bishop, was served in copious bowls of rich porcelain: it consisted of Burgundy and claret, mixed with sugar, spices, and Seville oranges. But, besides this, large goblets were continually handed about, containing Champagne, hock, hermitage, Cape, tent, sack, cherry, and Madeira. Port-wine, which had been twenty-three years in bottle, and of excellent flavour, was circulated in decanters, with Burgundy and claret. According to the custom of the country, we remained many hours at table: but we did not. wish to move; for the most cheerful conviviality, and the liveliest conversation, was maintained the whole time, without dispute VOL. VI. D

Anecdotes of the Emperor Paul of Russia.

dispute or intoxication. The only anxiety on the part of our host and hostess, arose from a fear lest their guests should not be as well fared, and as merry, as it was possible to make them. A considerable part of our mirth was caused by the anecdotes related of the Emperor Paul of Russia; at this time the subject of general conversation in most parts of Europe; and who was, without exception, the veriest state buffoon that barbaric power had ever elevated to a station in which, unfortunately for those around him, he could not be considered as contemptible. He had the means of doing mischief, and he largely indulged in them. However, being here remote from the rod of his vicious tyranny, the antics and the fury of this insensate fool were considered only as subjects of laughter; affording excellent amusement to those who merely heard of them: and we joined in the hearty merriment excited by the stories told of the Scythian despot, and of the creatures his favourites. The follies and absurdities related of Paul were without number. We may give, as specimens, only two instances. Almost every one has heard of his famous ukase against different articles of wearing apparel. Nothing was more strictly prohibited in Russia, than the wearing of pantaloons, trowsers, and shoestrings. At this time, a vessel, containing the Danish cadets, arrived at Cronstadt. The Emperor despatched a messenger with orders to invite the commanding officer of the ship, and all the young men, to his palace. The Danish officer . replied, that, by the laws of Denmark, the youths under his care were compelled to wear trowsers, and shoe-strings instead of buckles; consequently they could not presume to

make their appearance at the Russian court in a dress pro- CHAP. I. hibited by the Emperor. The next day an imperial ukase was issued, commanding all officers of the Russian navy to new-model their attire, and to appear dressed "like the Danish cadets at Cronstadt."—But a little before, a servant belonging to the Danish ambassador at Petersburg had been knocked down by a Russian sentinel, in one of the public streets of the city, for daring to appear in pantaloons; and the new regulation took place while an explanation of this affair was actually pending between the two courts. of all things likely to irritate Paul, and to put his temper to the severest trial, there was nothing more effectual than a pair of black breeches. A foreigner being presented to him in a full suit of black clothes, the Emperor had much ado to refrain from kicking him out of the audience-chamber, and, making a motion with his foot to that effect, ordered the sable visitant to be instantly turned out of court. Norwegians were among the objects of his aversion: but his dislike to them did not arise from their wearing black breeches, but from some indistinct rumours he had heard of their jovial clubs, and of the songs of freedom in which they indulged at their convivial meetings. The very word club was so connected, in his mind, with the club of the Jacobins at Paris, and other democratical associations, that he considered it as only applicable to revolutionary purposes; and, therefore, that every member of a club, of whatsoever nature it might be, ought to be considered as a reprobate, and interdicted from all communion with the inhabitants of " all the Russias."

Antient Teutonic Customs.

The Norwegians drink toasts with the solemnities of a public ceremony, mingling with them songs, as did all the ancestors and collateral branches of the Teutonic tribes. At Mr. Collet's table, we had the satisfaction of witnessing some of those old customs which one grieves to see laid aside, because they characterize historically the distinctions of nations. The master and mistress of the house, rising from their seats, perform a brief recitative, as a preliminary song to the toast · which they are about to propose. In these solemn airs the whole company joined; and they had a very fine effect; not being rendered the less interesting to us when we found they were the preludes to sentiments which Englishmen hail In this manner we drank "THE WOODEN with enthusiasm. WALLS OF OLD ENGLAND"-" BRITISH COMMERCE"-" RULE BRITANNIA"—" GOD SAVE THE KING"—and, with what grief of heart is it called to mind, as it stands written in our journals, and was so often reiterated from one end of the country to the other-" A PERPETUAL ALLIANCE BETWEEN England and Norway." No one, at this period, had even dreamed of the probability of an event which was to separate the inhabitants of the two nations, perhaps for ever. The links by which they were united were "the very bonds of peace, and of all virtue." Every feeling which animates the heart, and is the boast of an Englishman; which induced a native of Great Britain to sit down by a Norwegian as by his friend; were those which are most congenial

Lamentable conduct of Great Britain towards Norway.

congenial to the inhabitants of Norway;—holy patriotism; CHAP. I. manly courage; unblemished integrity; a sacred regard for all the duties which hold men together in society; the father to his child; the husband to his wife; the subject to his King; the creature to his Creator: and that Jesuitical policy, which, while it dissolves these ties, teaches that "it is lawful to accomplish a great good by doing a little wrong," is therefore disowned and scouted by every worthy inhabitant

of these now divided countries.

As soon as the company rise from table, it is customary to Ceremones of shake hands with the master and mistress of the house, and Table. to make an obcisance; or, being upon an intimate footing with the family, to salute the fair hand of the lady who has presided. All present then adjourn to another room, where There is no separation of the two coffee is served. sexes, as in England; where a custom, more barbarous than any thing in Norway, enjoins that the ladies be expelled soon after dinner, and sent into a sort of solitary exile until midnight. In Norway, as in more polished circles of society upon the continent, both men and women retire together. The gentlemen then light their pipes. A clean pipe is seldom offered; and this want of cleanliness, connected with a custom in itself barbarous and uncleanly, is one of the few disagreeable things of which a stranger has to complain. The card-tables are never covered/with cloth; and they are chalked all over, as at an ale-house. In playing cards, the game to which the better sort of Norwegians are most partial, is a species of whist, called Boston: it is in vogue all over Scandinavia, and is less simple and more hazardous

than our common game of whist, at which they also play. Whatever the game may be, the stakes are always low. Gambling seems to be almost unknown in Norway in polite company.

Magnificent Villa of Peter

Upon the following day, October the sixteenth, we had a still more sumptuous entertainment provided for us, at the stately country-seat, not to call it a palace, of Mr. Peter Anker, distant only three English miles from Christiania. We went to dine with him, accompanied by his brother. He received us with as much magnificence as any foreign Prince, but with all the hearty welcome and hospitality of his country, added to the splendor of a King. The suite of apartments was quite princely, and they were fitted up in the most elegant style. His gardens were laid out in the English taste; and the situation of his mansion, upon the borders of a lake at the foot of a rocky mountain, gave to the whole an appearance of great grandeur. In the gardens we were shewn an old Norwegian dwelling, preserved as a specimen of what the Norwegian houses were two centuries before; with all its furniture, and other appurtenances, as it then stood. Upon the walls of this building we observed the names of many travellers who had visited the spot, and, among others, that of the late Mrs. Godwin, thus inscribed, with a pencil, near the door—" Mary Wollstonecraft."

In the manners of Mr. Peter Anker there was something remarkably distinguished from the generality of his countrymen. His appearance, in the midst of the splendid scene over which he presided, was altogether that of the most accomplished potentate. Every part of his vast establishment was in

itself a curiosity, and merited particular attention. He CHAP. I. himself conducted us over it. "We shall pass through the kitchens," said he, "that English gentlemen, who are fond of neatness, may be convinced that what we have to set before them is dressed and served with cleanliness:" and certainly we never beheld any thing similar. The dinner was preparing in large airy apartments, where every thing was in the utmost order. Not a cloth was to be seen in the hands of any of the attendants, but what was perfectly white and clean, and of the finest linen. All the kettles and dishes and tables were polished, and without the smallest appearance of being soiled by use. One of the most pleasing sights in these lower apartments was the table spread for the poor: upon which, with the same degree of neatness as for his own family, all the pieces of broken victuals were collected, and set forth for distribution, into portions, according to the size of the different families for whose use they were appropriated. His stables and greenhouses were next exhibited, and everywhere we observed the same display of decent order and superior arrangement. In the greenhouses were pines, apples, melons, and peaches. We saw also the cellars, as storehouses, for preserving meat and vegetables through the winter. Every housekeeper lays in his stock of provisions in October. Returning to the grand saloon, we began to examine his collection of pictures, made by himself, at a His collection great expense, during his travels in Italy. It filled several chambers, which, opening into each other, presented altogether such a series of apartments as one sees in the Italian palaces, and especially in those of Genoa and Naples.

One room was entirely filled with original drawings of the old Masters; and these, instead of projecting from the walls, were let into them, and so glazed; which had a novel and pleasing effect. Of the drawings, and of the paintings, we shall mention only the principal, in a Note; it never having entered into our Scandinavian speculations to expect a dépôt of the Fine Arts so far towards the north.

Αt

(1) Drawings.

- 1. A Capucin Friar, with Children.—Paolo Veronese; perhaps by his son, Carletto Cagliari.
- 2. St. Cecilia. A most exquisite and undoubted work of Raffaello Sanzio. In this curious work of Raffael, the saint is surrounded with figures, grouped with matchless skill and effect. She is singularly represented as holding in her hands the pipes of an organ.

Paintings.

- 1. Ulysses and Circe, by *Pompeo Battoni*, the rival of *Mengs*. A large picture, with great coldness in the colouring.
- 2. Lot and his Daughters; (Michael Angelo da Caravaggio;) shewing the high degree of interest which this painter could give to the most vulgar forms, by his ideal tints of light and shade.
- 3. A Crucifixion; said to be of the school of Guido; certainly by one of the Bolognese masters, and a most valuable picture, of small size. The effect of the chiaro oscuro is here scientifically set off, with all that magical power of colouring which the painters, who followed the Caracci, so marvellously displayed.

At dinner, Mr. P. Anker told us that he kept fifty cows, CHAP. I. and consumed the whole of their produce upon his own establishment. When he was in England, he said, he had to complain of the great scarcity of cream which prevailed every-

- 4, 5, 6. Select pieces by Le Nain, representing scenes of still life; vegetables, green-stalls, &c.
- 7, 8. Battle-pieces by Bourgononi.
- 9. Annunciation of the Nativity to the Shepherds of Judæa. Jacopo da Ponte. Painted with all the vigour of the older Bassano, but with that monotony, and meanness as to the objects, into which this fine painter degenerated in the latter part of his life.
- 10. Some pictures attributed to Leonardo da Vinci;—a name easily bestowed upon, and often given to, paintings which have been highly finished with a dry and stiff outline, without any of the real excellence of Leonardo.
- 11. Several works of Gherardo della Notte, and of Schalchen; representing, as usual, night-scenes by candle and torchlight.
- 12. Portraits by *Denner*, purchased at very high prices: these were executed with all the laborious exactness and *facsimile* touches which distinguish the highly-finished works of this master; in whose pictures, as in those of his wife and himself, even the pores of the skin are said to be visible.

In this list, only the most striking pictures have been noticed: nor would any such attention have been paid even to these, had they been found among the more frequented haunts of the Fine Arts. In the billiard-room we saw a complete set of *Hogarth's* engravings, and they were the very best impressions from his plates.

every-where, even in the best houses. In Norway, a great quantity of cream is consumed by the inhabitants; but especially during the strawberry season, which lasts six weeks. They give the preference to the white alpine strawberry, and think their wild strawberries very superior in flavour to our garden strawberries in England. The horses of the country, though small, are remarkable for their strength and speed. He told us that a short time ago he possessed a horse capable of trotting a Norway mile, when harnessed to a sledge, within a quarter of an hour. The peasants and poor of Norway will not eat rabbits: they fancy them too much like cats. It is, moreover, difficult to make them cultivate the potatoe where that vegetable has not been yet introduced; so bigoted are they to old habits in respect to food. This, however, is pretty much the case in all countries. Who could prevail upon an Englishman of ordinary circumstances to eat a rat', or a hedgehog? Yet these are acknowledged as affording delicious morsels in countries where the inhabitants are not liable to the same prejudices.

Prejudices of the *Norwe*gians respecting food.

Courts of Judicature.

We had some conversation on the mode by which justice is administered in *Norway*. There are four principal courts of judicature; one in each government, in which the Grand Bailif or Governor presides. From these, however, an appeal lies to the Supreme Court at *Copenhagen*. In the trial of every cause,

⁽¹⁾ An officer of the navy once told the author, that rats, caught on board our ships of war and dressed as rabbits, are sometimes considered as good articles of food; and he confessed that he had often relished a roasted rat.

cause, a jury of six men assists, not chosen as with us, but for life. There is also, in every parish, a Commission of Conciliation, before which every cause must be stated, previous to its going into a court of justice: and it is the office of the commissioners to mediate between the parties, and, if possible, to compromise matters. The party refusing to abide by the opinion of the commissioners is condemned to all the costs, if it do not afterwards appear upon trial that he was in the right.

Mr. Anker spoke of the connection of Norway with Denmark as most fatal to the interests of the former. He mentioned, at the same time, the great attachment borne by the Norwegians towards the English, and their hatred of the If Norway were connected with England, and Swedes. the trade left perfectly free, it is thought it would soon rise to a flourishing state. This project was once held by Mr. Pitt; and among the Norwegians, with whom Copenhagen is considered as the sink of all the wealth of their country, it would not fail to meet with encouragement. such were their feelings at this time with regard to our own country, that we had every reason to be convinced, if Denmark, as it was expected, had entered into an offensive alliance with France, the people of Norway were resolved to invite an invasion from Great Britain, and to have acted in concert with us against the Danes.

Norway imports annually 300,000 quarters of corn. Her principal exports are deals and iron. Mr. B. Anker possessed one hundred and fifty privileged saw-mills, situate chiefly in the Glommen, which runs to Frederickstad. Indeed, the port

of Frederickstad was, for the most part, possessed by two merchants; Mr. B. Anker, and Mr. de Rosencrantz: the former of whom considered it as being more advantageous to him than all his other possessions, on account of the facility with which all the timber is floated. Those who have forests up the country, are obliged to transport the timber on sledges in the winter, which makes a great difference in the expense, and, moreover, causes the delay of a year. A saw-mill cannot be erected without a privilege from the King.

Commerce of Christiania.

The commerce of Christiania consists in the exportation of timber, iron, copper, alum, glass, tar, and skins. The value of the exports amounts annually to the sum of 150,000l. sterling. The iron works of Mr. Peter Anker alone yielded annually ten thousand schippunds of iron. The best iron which Norway produces comes from those works: they are at Bærum. The deal planks from Christiania are in greater estimation than any other. This arises principally from the great improvements made in sawing them, and in cutting the timber for the sawing-mills. The Christiania planks have all neat marks upon them, by which they may be known. Patent saws are used in cutting them; and no person is allowed to saw timber for exportation, unless the patent saws are used. The iron and copper works belonging to Bernard Anker are situate at the following places:—

Moss.

⁽¹⁾ Six and one-third schippunds of Norway are equal to one English ton.

Moss.—Iron works, and a foundry for casting cannon, and for the fabrication of bar and rod iron, nails, &c.

CHAP. I.

HAKKEDAHLS.—Iron work. Here there is a most complete fabric for amalgamation, and the richest copper ore found in Norway. HADDELANDS.—Copper work.

STUKKENBROCKS.—Mines, and copper-works, where there are very rich cobalt ores. These are situate eight miles from Kongsberg, in the parish of Nummedahl.

The annual imports of Christiania are valued at 100,000l. sterling. They are principally from England, and consist of cloth, stockings, Norwich camlets, hard-ware, lead, coal, &c. Add to these 100,000 barrels of corn from Denmark and the Baltic, to the amount of 50,000l. sterling annually.

The population of Christiania, including that of the old town Population. of Opsloe, where the Bishop of Aggerhuus now resides, and the small suburbs Scherwiger, Grönland, and Fjerdingen, amounts to 9000 inhabitants. The King of Denmark receives annually two millions from Norway; and of this sum he expends only 300,000, of which 250,000 are lavished upon the unprofitable silver mines of Kongsberg. The population of all Norway, according to an estimate brought down to the present year, amounted to 970,000 inhabitants, in an extent of 322 Norway, or 2100 English miles, from the point of Lindernæs to Wardoehuus. The corn required for the whole country amounted to 600,000 barrels, at 2½ per barrel, or 1,500,000 rix-dollars, equal to 300,000l. sterling. The exportation of all Norway was estimated at nine millions of rix-dollars, or 1,800,000l. sterling, in addition to the profits she derived from the freights of a great number of ships.

When

When a stranger sees the magnificent dinners to which he is invited in this country, he naturally concludes that some rich market has been ransacked to procure for him an entertainment: yet not a single article has been purchased for the occasion. There is no part of Europe where more sumptuous or more varied banquets are exhibited, than in Christiania; and yet the whole of every entertainment, as was before stated, is produced from the store-rooms belonging to each house. The mistress of the family superintends and presides over the whole; and when all is prepared, she comes forth, and receives her company with as much cheerfulness, and conducts herself with as much propriety and elegance, and as much seeming indifference respecting the economy of her table, as the most "high-born dames in rooms of state." It has been said, that the women of Norway are domestic slaves, and their husbands domestic tyrants. we are ready to allow, may be found in the former part of this sweeping assertion; although there be none whatsoever in the latter. But the slavery of a Norwegian wife is voluntary; she delights in her labour, because it is "the labour of love;" and if this be "domestic slavery," it is well repaid by domestic happiness; by a full measure of reciprocal regard and affection in the fidelity and increasing attachment of her husband: for "as the sun when it ariseth in the high heaven, so is the beauty of a good wife in the ordering of her house." An objection has also been made to the Norwegians, that they continue too long at table during their meals; but the English waste more of their time in the same way. It is true that the meal is longer in Norway;

because.

Manners of the Christianians.

because a greater variety of dishes and wines are brought round, one after the other: but no person is pressed to eat: every one takes or rejects what is presented to him, as he pleases: and the conversation not being general, he converses with his neighbour, or listens to others more disposed than himself to be communicative. At the same time, in describing the manners of the people of Christiania, it must be confessed that they are not so strictly Norwegian as those of Trönyem. From the more frequent intercourse which here takes place with other countries, the ill effects of what is called refinement become daily visible, while the Christianians retain a number of barbarisms which might well be laid aside. The good old virtues of this country are making hourly sacrifices to the follies and caprices of other nations. To place this in the most striking point of view, Comparison between the nothing more is necessary than to compare the manners of Inhabitants of the people of Tröngem with those of the inhabitants of Christiania. Christiania. In the former of these two cities, the Norwegians appear as their best friends would wish to see them. The inhabitant of Tröngem cannot be better described than in the language of one of our English Poets:-

Trongem and

" An honest man, close button'd to the chin; Broad cloth without, and a warm heart within."

The man of Christiania is more a man of the world, and more of a beau: the respectable old custom of his forefathers is laid aside, and with it many of the qualifications which render a man amiable and praise-worthy. His language is more complimentary, and consequently there is less of truth CHAP. 1.

in it. The native of Trönyem gives you an invitation to his table, and you find it well supplied; but the supply is such, that you might find it there if you had not been invited: the stranger is therefore always welcomed, and with sincerity, because his arrival causes neither interruption nor inconvenience. On the other hand, the native of Christiania prepares a feast so magnificent, that his guest perhaps regrets he was ever invited where every thing tells him he is to be considered as a stranger; and even there an apology is made to him because he has not been provided with a more costly entertainment. The inhabitants of both the one and the other make their professions freely, and both are men of generous feelings; but the profession on one side is sincere, and the proffered service marked by its obvious utility:—on the other, it has more in it of the mere façon de parler of a polished people; and the generosity shewn, however proper, is sometimes ostentatious. In venturing these remarks, from a due regard to correctness of delineation, no reflections are aimed at any individuals whose names have been already mentioned. The observations must be considered as directed towards a whole people, and in the full, belief that the same people would subscribe to their accuracy. Something beyond mere temporary impressions attaches the author of these remarks to Norway, and to its inhabitants. Gratitude for the warmest hospitality, and the most generous kindness, might seem to call for nothing but expressions of acknowledgment and of praise; but it is a duty owing to those whom we esteem, to point out the channels by which evil is communicated to them, and their social

social welfare endangered. This danger arises from foreign corruption, foreign luxury, and foreign manners. May the Effect of best friends of Norway always find it peopled by true tercourse. Norwegians; by the descendants of a race of heroes who were never enervated by vices of foreign growth,-rank weeds, engendered in less healthful territories, and fostered by hotter suns! To what other cause, than to the intercourse with foreigners, can be attributed the change which a traveller finds in Christiania, as to the honesty of the lower orders? It has been already mentioned, as a remarkable fact, that we never saw a beggar in Sweden; but Norway has many beggars, and Christiania is full of them. In the northern districts they are less numerous, but here they . actually swarm. The very passages and chambers of the inn where we lodged were never free from mendicants. They would open the doors of our apartments without hesitation, and enter even into the bed-rooms. found any person within, they were clamorous for money: if not, they supplied themselves with whatever they could lay hold of as most portable. Some of them had the audacity to steal stockings belonging to our servants, from their bed-rooms, before their faces. These, again, are traits in describing national manners, which will not be quite acceptable

^{(1) &}quot;In passing through the country" (Sweden), "which has the character of being poor, one is surprised in never meeting with any beggars or miserable objects who demand or excite charity. The reason, as assigned by the Swedes, is, that there are hospitals for all such persons; and the poor, who might be expected to sue for charity, are supported by their own parishes. The same plan is in existence in England; why does it not produce the same effect?" Dr. Fiott Lee's MS. Journal.

acceptable in the sight of the Norwegians; but they arise from that mixture with the inhabitants of other countries, to which, as a place of foreign commerce, Christiania is rendered liable. The genuine native Norwegian is neither a beggar nor a thief. The consequence, however, of so much indigence, mixed with so much wealth, is a constant call upon the rich to support and maintain the poor. Nothing conduces more to keep the latter in a state of indigence than the institution of public poor-houses, however benevolent the views of their founders. Bernard Anker, the pattern in his own example of benevolence towards the poor, supported two houses of this description at his own expense; but then he wisely contrived that they should become houses of industry as well as of charity'. He eminently possessed that "voluntary and active charity which makes itself acquainted with the objects which it relieves; which seems to feel, and to be proud of, the bond which unites the rich with the poor; which enters into their houses; informs itself not only of their wants, but of their habits and dispositions; checks the hopes of clamorous and obtrusive poverty with no other recommendation but rags; and . encourages with adequate relief the silent and retiring ifferer, labouring under unmerited difficulties"."

Institutions for the Poor.

there

⁽¹⁾ There were two asylums for orphans; one public, and the other private. Both were supported by Bernard Anker, and at his own cost.

⁽²⁾ See the valuable chapter upon "The direction of our Charity," by Professor Malthus, in his admirable work on "The Principle of Population," Book iv. p. 562. London, 1803.

there were a man in whose individual character every CHAP. I. qualification had been combined, fitted to form the patriot, Character and the statesman, the friend and guardian of society; the Conduct of deliverer of the needy; the public benefactor; the patron of Ankers. genius, of literature, and the arts; it was Bernard Anker. Nor let the tribute pass without rendering also a due regard to the distinguished virtues of his brother; who, retiring from the noise and dissipation of cities, upon the borders of his Norwegian lake, and in the solitude of his magnificent villa, dedicated all his hours to promote the good of his country and the general welfare of mankind. And let it be repeated, that these men were Merchants of Christiania. Excellent examples! Europe has not had their parallel. Nor can the history of the world afford more striking instances of the national advantages to be derived from the exertions of private individuals so circumstanced;—who directed the streams of their benevolence into channels where they might flow to the utmost possible public advantage; who, while they "fed the hungry, and clothed the naked, and visited the fatherless and widows in their affliction," were all the while engaged in active scenes of commerce; and who encouraged industry, and rewarded merit,—taking the most especial care that the means for these great ends should. neither be wasted by want of foresight, nor exhausted by indiscriminate profusion.



CHRISTIANIA: INCLUDING A VISIT TO THE SILVER MINES OF KONGSBERG.

Want of Booksellers' Shops - General aspect and condition of the Streets — Cathedral — State of Literature—Public Library—Dr. Müller's Collection of Minerals-Journey to Kongsberg-Marble Quarries of Gilljebek-View from Paradise Hill-Drammen-Hogsund-River Louven-Kongsberg-Original Discovery of the Silver Ore-State of the Works-First Settlers-Remarkable Specimens of the Native Metal-Wages of the Miners-Present Establishment—Cause of the loss sustained by Government—The different Excavations—Approach to the Works—Geological nature of the Mountains-Manner in which the Kongsberg Silver is deposited—Descent into the Mine - Native Mineral Carbon-Crystallized Native Silver—Erroneous notions entertained with regard to the Crystallization of Minerals—Metallurgical operations for the treatment of the Kongsberg Ores-Public Seminary for Mineralogy-Professor Esmark - Collection of Minerals belonging to the Kongsberg Academy-Customs shewing the common origin of the Teutons

Teutons and Greeks—Superiority of the Norwegian Women—Medical Properties of the Linnaa Borealis-Condition of the Peasants-Alum Works-Synthesis which takes place in the production of Alum-Return to Christiania-Public Balls-Rage for English Fashions-Further account of Bernard Anker-Timber Trade-State of Religion in Norway-Fortress of Christiania.

THERE is not in all Norway one bookseller's shop. Christiania and in Trongem there are, it is true, bookbinders Want of and stationers, who sell a few Bibles, Prayer-books, and Shopes. Almanacks; but it is in vain to look for other publications. The chief articles in the shops are, grocery, Manchestercottons, Birmingham and Sheffield wares of the cheapest and worst kind, woollen drapery, buckles and buttons, iron ware, hinges and locks, and such other common articles as may be observed in the shops of the poorest villages in England. The widest streets of Christiania are not so broad General as Bond Street; and in these the shops, though numerous, condition of the Streets. make no figure. The pavement, as in some of our old towns where improvement has not been attended to, slopes towards a filthy sewer in the mid-way. Into this middle channel, of course, is cast all the dirt and drainage of the houses, where it is left to stagnate. Towns in which such nuisances are tolerated cannot be wholesome; yet of this nature were many of the cities of the Greeks and Romans'. intersect

In CHAP. II. Booksellers'

⁽¹⁾ That the present state of Constantinople exhibits what the city was under the Roman Emperors, has been already shewn in that part of these Travels which relates to TURKEY. In the plates of the magnificent edition of Banduri's Imperium Orientale, (Paris, 1711,) there is a series of engravings made from the bas-reliefs of the Historical Pillar, which exhibit the streets of Constantinople as they existed in the

intersect at right angles, and in all other respects Christiania has been built after a regular and uniform plan: at the intersections of the streets there are conduits for supplying the town with fresh water. The outsides of the houses are not so neat as those of Tronyem; neither has the town by any means so cleanly an aspect; nor can it boast of so much picturesque beauty, although its situation among inlets of the sea give it a pleasing appearance. approach to all the houses is by a flight of steps. The lower story seems to be half buried, like the offices for menials of the houses in London; and the windows of these subterraneous apartments are protected from the snow by a shed built of wood, which is made to cover and close over them. The cathedral is a plain building, remarkable only for the resemblance which is exhibited in its interior decoration to some of our old churches in England, where the pews of the principal families, like so many separate oratories, are surrounded by high clumsy partition sides, containing casement windows, glazed. Such pews are suspended over the aisles

Cathedral.

the of Arcadius: and in these engravings the Roman infantry is represented upon a high causeway, serving, as it does now, for the foot passengers; while the cavalry occupy the deep midway channel, which, at present, is always filled with all the ordure and refuse cast from the houses. Here also the wretched captives, dragged in triumph after the chariots of the Roman army, were made to walk.

(2) Many years, in all probability, will not elapse before every trace of these old Gothic pews will have disappeared from our churches. They were constructed in times of feudal splendour, when the persons of high-born dames were deemed too sacred to become the gaze of the profane vulgar. Even during the solemnities of public devotion, a certain degree of seclusion from the rest of the congregation was resorted to as a mark of their distinction; and their appearance in the church was like

aisles in the church at Christiania. We visited this building CHAP. II. during divine service, upon a Sunday, in the morning. It was a very fine day, yet there were not twenty persons assembled: and, judging from our casual visit upon this occasion, we concluded that the duties of the Sabbath are less regarded here than in any other town of equal size in Europe. Over the altar we observed a representation of the Last Supper, in very barbarous wooden sculpture. The figures were as large as life; and, among these, an image of St. John had been squeezed in between the table and the effigy of our Saviour, in a most ludicrous manner, as if about to be strangled. Being at a loss to reconcile this situation of the Evangelist with any thing related of him in the Gospels, we applied for information to others who were better informed; who told us that it was necessary he should be so placed, that he might appear as in the bosom of Jesus.

The literature of Christiania, although an Episcopal See, is State of Literature. at a low ebb. It cannot be otherwise, separated as this place is from the mother country, without a University, and without the common convenience even of a Bank for its

commerce:

that of Turkish ladies in a mosque, being shut up in cages fronted with trellis-work. Some of these cages yet exist in old English churches. There is one in the Church of Hothfield in Kent, belonging to the noble family of the Tuftons, Earls of Thanet. The remains of others may be seen in various parts of our island. Another mark of the striking similarity of manners between the inhabitants of the two countries, is the practice which exists in England and in Norway of dividing the lower orders of the congregations according to their sexes; making the men sit apart from the women, during divine service.

CHAP, II.

commerce: consequently, it has produced no eminent literary characters. But Norway, in general, has produced many: as, for example, the celebrated Baron Ludwig Holberg, who founded the Academy of Söröe, and was the author of works in history and poetry; Bishop Pontoppidan, who wrote the History of Norway, a very jejune performance, and unfortunately the only one that has been translated into English; Professor Schönning, who wrote the best history, and several dissertations upon the Antiquities of Norway; Bishop Gunnerus, who founded the Royal Society of Sciences at Trönÿem, and wrote upon the Natural History of Norway; Professor Vahl, one of the best botanists in Europe: add to these, the old historians Tormadus Torfæus and Snorro Sturleson. But although Christiania may have been deficient in the higher walks of literature, it has not been without poets, as in the instance of Tullin; nor without men of eloquence, as in the examples of the Bishops Hersleb and Deichmann. In the rest of Norway, poets have been numerous; as in the examples afforded by Nordahl Brunn, Hans Bull, Pram, Stockfletts, Vibe, Zellitz, Fasting, Rein, Schmidt, Vessel, Steenersen, Storm, &c.; -names familiar among "old Ducere's Echoes," although hitherto unheard in Britain; and as little known in any other part of Europe, as the Songs of the Scalds, who accompanied the armies of their ancestors, and were as necessary to the prowess of a Norwegian, as either Druid, or Bard, among the Celts. Poetry has been long cultivated in Norway, and it was held in esteem among the inhabitants from the earliest periods of their history. "The Muse had broke the twilight gloom," long before

they had any literary communication with more civilized CHAP. 11. Their poetry, therefore, such as it is, must be regarded as their own: it may be compared indeed to the streams from their native mountains, rolling impetuously along their valleys, but unmixed with a single drop from any of the waters of Helicon.

As connected with this subject, the literature of Public Library. Christiania, we shall now mention its Public Library. was the legacy of Mr. Deichmann, a native of Norway. The anti-room contains a curious painting by John de Mabeuse, well worth the notice of those who are interested in viewing the early productions of the art; also a complete set of antient and valuable engravings from the Cartoons of Raphael. Within the library there are no classic authors: it consists chiefly of modern historians; but there are some copies of more antient writers upon Denmark and Norway. We saw a very fine edition of the Latin translation of Snorro, which was printed, in folio, at Copenhagen, in the year 1777: also a copy of the French folio Encyclopédie; and the superb D nish botanical work, entitled Flora Danica. Among the rest, amounting to some thousand volumes, there were few worth notice. They had no Icelandic manuscripts; but we saw here a curious collection of medals, and many valuable minerals. In the mineralogical series there were three hundred different specimens of silver from the works at Kongsberg and other Norwegian mines. But every thing Dr. Muller's of this kind, in Norwey, is eclipsed by the cabinet of Minerals. minerals belonging to Dr. Müller; to which, as we had free access, during our stay here, we often resorted. We shall,

therefore.

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CHAP. II. therefore, now add a few observations concerning this valuable collection, and its very worthy owner.

Dr. Müller is a native of Denmark. He was once well known in London, where he distinguished himself by his talents, as a physician, a chemist, and a mineralogist. In our country he was the friend and follower of Hunter; and was the first person who publickly delivered lectures in Mineralogy in our metropolis. Dr. Babington, who has since composed a System of Mineralogy, was one of his pupils. Upon the continent he was successively the disciple of Lavoisier, Klaproth, and others: in Germany he studied under Werner; and in Holland obtained the prize-medals for his compositions in Latin poetry. His collection of minerals at Christiania, which he has annually augmented, and kept with uncommon neatness and care, is the most beautiful, and, if we except that of Assessor Esmark, at Kongsberg, also the most geognostic of any in all the north of Europe. Tt. amounted, at this time, to upwards of 4000 specimens. But what rendered it particularly valuable in our estimation, was, that it contained many specimens illustrating the mineralogy of our island, which cannot be seen in our own country, because they are not now found in Britain. The in cresting varieties of tin oxide, in the form of stalactites, whether as wood-tin, or under any other trivial name, together with a copious series of crystals from the mines of Cornwall, were the finest specimens we had ever seen. To these were added a beautiful series of bituminous bodies, . selected under circumstances of association, all of which were calculated to illustrate some fact in the natural history

of the mineral, or to confute some prevailing error. Among CHAP. II. the English minerals we also saw varieties of actynolite, and of asbestus, from the western coast of Scotland; extraneous fossils from our limestone quarries; and varieties of granite, and other compound minerals, from the quarries of Aberdeen. Among the foreign minerals were specimens of the utmost rarity; such as rubies and diamonds in their matrices; together with an important series from the Swedish and Norwegian mines, identifying many substances which have been separated in all the most celebrated systems of mineralogy. Add to these the most magnificent specimens of native gold, silver, antimony, iron, and copper, which any collection in Europe can boast; and some idea may be formed of the importance and riches of this remarkable cabinet. Dr. Müller has also an extensive knowledge of botany, and possesses a valuable Herbarium.

It was in company with this gentleman, and our English Journey friends, Messrs. Kent and Jarret, together with a little boy, the son of Dr. Müller, that we set out for the Kongsberg mines. We left Christiania upon the twentieth of October, in a coach and four, followed by our phaeton drawn by a pair of horses. The roads were very bad, and at this season of the year rendered almost impassable by the depth of the

mud

(1) For the mineralogical reader it will be proper to mention a few instances of this nature; tending to simplify the science of mineralogy, and to curtail it of many superfluous names. Dr. Müller has succeeded in identifying amphibole with tremolite or grammatite; also pyroxene with all the substances called kokkolite, sahlite, mussite, alalite, and diopside; and again, Gabronite with Scapolite and Wernerite.

ries of Gilljebek.

mud which covered them. Our route lay along the coast upon the western side of the bay, affording beautiful views of the distant islands. We changed horses at Ravensbörg Marble Quar- and Gilljebek'. After passing Gilljebek, at the distance of about an English mile, we came to the marble quarries upon Paradise Hill. Here we halted: and collected from the quarries a few very interesting minerals, for which this vein of transition marble is remarkable; namely, ashestiform tremolite, containing imbedded crystals of dodecahedral green garnets, and also dodecahedral crystals of green carbonated lime, which seem to have owed their form to cavities left by the garnets: they were not, however, hollow, as pseudomorphose crystals generally are; and might easily be confounded with the garnets, from their resemblance in size, colour, and form. The geological features exhibited by the rocks at Gilljebek are indeed remarkable: the marble lies

⁽¹⁾ The places are named as they appear in Pontoppidan's large map. They are pronounced Ravensburg and Giellebeck.

⁽²⁾ All the rocks here have been described by Von Buch as belonging to the transition formation; otherwise this marble is, to all appearance, of the kind called primitive marble. It has the same crystalline structure, and the same whiteness. Speaking of the rocks in the neighbourhood of Christiania, Von Buch says, "I found here stones which were never supposed to be in the transition mountains, but which were here seen with such a distinctness of stratification, that not a doubt could remain as to their relations. in this respect: * * * * Porphyry in immense mountains reposing on limestone full of petrifactions; a syenite over this porphyry, consisting almost entirely of coarsegranular feldspar; and in the same manner, a granite not different throughout in its composition from the granite of the oldest mountains. Granite above transition limestone! Granite as a member of the transition formation!" Von Buch's Travels through Norway, &c. p. 45. Lond. 1813.

lies upon a stratum of granite, and beneath the granite occurs CHAP. II. a schistose porphyry. This porphyry in several places rises to the surface; the basaltic hills near Drammen, mentioned by Linnæus as a species of trap, being composed of it. Many varieties of porphyry are found upon Paradise Hill; also red and grey granite; green jasper, and ribbon-jasper; and red and yellow feldspar. In the pavement of the streets of Christiania, there had been found, by Dr. Müller, blocks of ribbon-jasper; but in our own observations upon the jasper found here, and also near Christiania, we should, in some instances, almost hesitate to consider it as jasper; that is to say, as a pure hydrate of silica. It seemed rather a kind of rock flint, approaching in its degree of hardness to that of jasper, but having a more earthy fracture, and not being susceptible of so high a polish: The proportion of alumina in the stone seemed to be very considerable; and so it is indeed in some of the varieties of jasper said to have been analyzed by Kirwan' and Rose'; but the fact is, we have no good analysis of the substance commonly called jasper; and hence the ambiguity attached to all the descriptions of this mineral. The name is sometimes applied to veined agate, a compound mineral consisting of chalcedony and quartz; sometimes to striped chalcedony; and even in some instances to greenstone trap, where the paste is fine, and the particles of this aggregate too minute to be discerned by the naked

⁽³⁾ See Allan's Synoptic Tables, Tab. xxii. Edin. 1814.

⁽⁴⁾ Ibid.

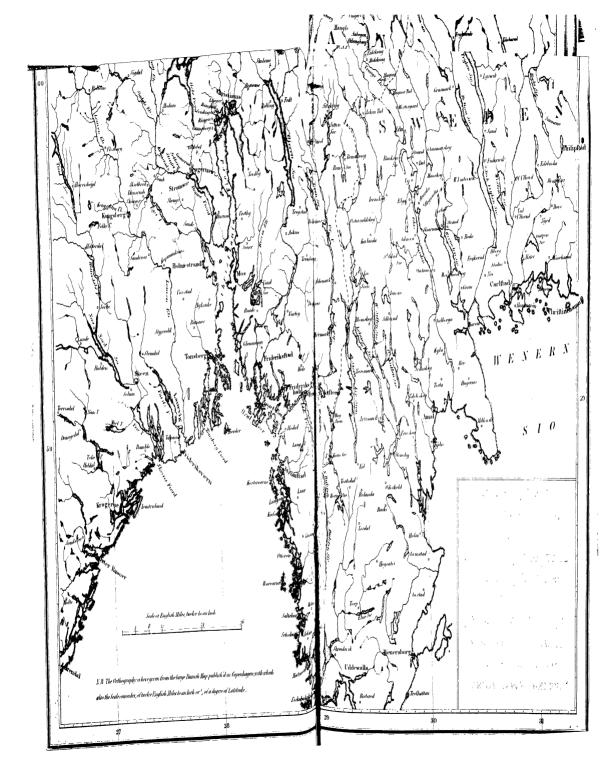
naked eye. Still more frequently has the name been applied to hornstone; especially when the layers of hornstone are of different colours, so as to occasion the striped appearance which gives rise to the appellation of ribbon-jasper.

View from Paradise Hill.

Drammen.

From Paradise Hill we had a delightful view of the whole of Leer Valley, with the towns of Tangen, Strömsoe, and Bragernæs; which go under one common name of Drammen, owing to the river Drammen, whereon these towns are situate. The descent upon Drammen, as it is thus called, may be reckoned among the finest things in Norway. To the right of the spectator rise mountains of basaltic porphyry; towards the left and in front extends a magnificent valley, combining almost every thing that nature and art can contribute to render such a prospect pleasing to the eye; upland and dale, and rocks and woods and water, decorating the smiling scenes of human industry, and appearing with an aspect of greater cheerfulness, because garnished with many picturesque buildings, denoting a numerous and thriving population. The people of Drammen are said , be richer than those of Christiania; but they lead a more private and retired life. The principal resident foreigners are from Holland; and these Dutch families may be considered as holding a station at Drammen similar to that of the English in Christiania. There are also some Italians

^{(1) &}quot;So thickly peopled," says Mr. Coxe, "that every fifty yards we observed a cottage, and for several miles together seemed to pass through a continued village." Travels into Norway, vol. V. p. 232. Lond. 1791.



Italians settled here, who are in a flourishing way. The CHAP. II. timber of Drammen does not find a market in England; the deal planks being short and bad: but it goes to Holland, and is there sold.

We changed horses at Bragernæs, and came to Hogsund; Hogsund. having pursued our course through a populous and delightful valley, along the banks of the Drammen. The situation of Hogsund, on the river and near to a cataract which turns some saw-mills, gives it considerable beauty. The clouds were now low, and hung in various fantastic shapes upon the mountains. Hence the distance to Kongsberg is two Norwegian miles, over a very hilly road. Leaving Hogsund, we were ferried over the river, and continued our River Louven. route to Kongsberg, upon the Louven'. We passed a small but pleasing lake upon our left. Towards Kongsberg the mountains became higher, and more denuded towards their summits. We descended a long and steep hill into the town of Kongsberg, entering it by a wooden bridge over a roaring cataract of the river Louven, which made a most tremendous appearance at this season; perhaps owing to the late rains, which might have given a character of more terrific grandeur to this fall of water than it usually possesses.

A man must be indifferent indeed to natural history, who Kongsterg. does not feel some degree of curiosity respecting Kongsberg, in whose mines a mass of native silver was found, in one entire

entire piece, weighing nearly six hundred pounds'. independently of its mineral celebrity, Kongsberg, as a handsome town, is a place of considerable distinction in Norway. The streets are wide, and many of the houses are neat and well-built. Its very existence, however, is owing to the excavations carried on here in search of precious ore; for when this was first discovered, there was hardly a cottage near the spot. This event took place in the year 1623,2 by means of a boy, whose foot, in pursuing some cattle, was arrested and caught by a hook or thread of native silver projecting above the surface of the rock. Very different accounts are given respecting the profits which the Danish Government has derived from the Kongsberg mines: the general opinion, however, seems to be, that the undertaking is attended with It was stated to us upon authority which we were inclined to credit, because coming from those who had the principal management of the works, that the annual loss to

Original discovery of the silver ore.

Government

^{(1) &}quot; Luid Norvegiæ in fodinis Kongsbergensibus, ubi jam per seculum vix nisi argentum nativum et semel iterumque etiam aurum, tanquam auræ melioris progenies, in lucem et diem gelidissimum plenissimo sæpe cornu prodierat, cujus annuum proventum ab anno 1711, ad 1724, sistere volupe est, ut inde miranda naturæ phænomena in regno subterraneo existentia luculentius contemplari liceat." Svedenborg in præfat. "Regni Subterranii."

⁽²⁾ Pontoppidan is agreed as to the date of the discovery, but differs as to the manner of its being made. He relates a somewhat improbable story of the herdsmen pelting each other with the ore. (See Nat. H. st. of Norway, vol. I. p. 183. Lond. 1755.) And the story of the boy, whose foot was caught by a thread of native silver, is too much of a piece with the circumstance related as to the origin of the famous Peruvian mine, not to suppose that the two narratives had, at the least, a common origin.—The discovery of the rich mine of Potosi is said to have happened on the 24th of April, 1545.

Government amounted to 240,000 rix-dollars: and when we CHAP. II.

inquired, why, under such circumstances, the excavations were continued, we were told that the employment given to a great number of inhabitants, who would otherwise be without the means of subsistence, induced the Danish Government to persevere. But that an endeavour is making to contract the works, is plain from this circumstance, that every miner is encouraged to leave Kongsberg by a premium offered to him of a year's pay after his departure. very nature of the mine must have given rise to extraordinary vicissitudes of hope and disappointment; because, as the search is carried on in pursuit of imbedded masses of native metal, dispersed for the most part in capillary forms and unconnected laminæ, rather than in any regular veins, it must happen that the labour will frequently prove abortive for a considerable length of time, and, at intervals, be perhaps attended with sudden and unexpected success. Pontoppidan, whose account of the works here was written in 1751, calls it' "the present flourishing mine at Kongsberg." He says, that, to the best of his knowledge, it is "the most State of the considerable and of the greatest profit of any mine in Europe; and in respect of pure massy silver veins, quite. inexhaustible." The first inhabitants of the new-built First Settlers. town of Kongsberg, when the works commenced under the auspices of Christian the Fourth, were miners from Germany; and they were the ancestors of the many thousands now living

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⁽³⁾ Nat. Hist. of Norway, Vol. I. p. 183. Lond. 1755.

Remarkable Specimens of the Native '

In process of time, the German settlers mixed living there. with the other inhabitants; and now all of them are under the direction and government of the College of Miners. The silver, as it was before stated, occurs in lumps of native metal: but so unusual is this circumstance, that when the mine was first discovered, many refused to give credit to the fact of such masses being actually brought to light. We shall mention some of the most considerable. The first, is that preserved in the Royal Museum at Copenhagen'; its weight being five hundred and sixty Danish pounds, and its value five thousand rix-dollars. It is a mass of native silver nearly six feet in length, and in one part above eighteen inches in diameter. Similar masses were discovered in the year 1630, and in 1710, and in 1727, which severally weighed from two hundred and fifty, to two hundred and eighty, and three hundred pounds, each. In the shaft called St. Andrew, a piece of pure silver was found, in 1727, weighing two hundred and seventy-nine pounds: and, in the same year, another, weighing three hundred and four

⁽¹⁾ See the account of Copenhagen, Part III. Sect. I. of these Travels, p. 78. Lond. 1819.

⁽²⁾ Pontoppidan says it is the same of which the measure in Danish feet, &c. is thus given by Olig. Jacobeus, in his Museum Regium, p. 31. "Minera ingens argenti ex fodinis Norvegiæ, pedum quinque et pollicum sex longitudinem æquat, crassitiem verò in circumferentia pedum quatuor." And the dimensions, as here stated, seem to coincide with our own measurement of the specimen now preserved in the Royal Cabinet. "Anno 1666, d. 24. Augusti ex fodina Norv. Regiomontana, quæ Novæ Spei appellatur vulgò, extracta est 560 librarum pondere, et a præfecto fodinæ memoratæ, pretio 5000 Imperialium estimata. Huic non dissimilis massa, anno 1630, regnante in Dania divo Christiano Quarto, ex fodina Norvegica quæ Benedictio Divina vulgò, eruta est, quæ 3272 Imperialium fretio estimata."

four pounds, was found in God's-Blessing shaft. These CHAP. 11. occasional masses, occurring casually in the rock, and being soon interrupted in their passage through it, or dwindling gradually to nothing, the miner must continue to dig through the barren stone until he has the good fortune to meet with more of the same nature, which in one day may reward the fruitless labour of months, and perhaps of years. Pontoppidan says, that after the discouragements of a long and fruitless toil through the barren interstices of the mine, "it suddenly exhibits several thousand pounds weight of silver, and thus discharges all arrears and embarrassments, and animates to further prosecution." Such was the statement made by a writer in the middle of the eighteenth century. According to the account given to us by the present Governor, 130,000 dollars are coined annually from the produce of three mines. In general, 2300 men are employed, who earn each about a shilling a day of our money. This Wages of the seems very little; but, in addition, the King always supplies the miners with corn at a fixed price, much below the average value. At this time, the price of rye, per ton, was six dollars and a half, and the miners were allowed rye at two dollars. The miners work from five to one o'clock, summer and winter. When they work in the afternoon, they are paid an extra allowance. There is generally employment for the children of the miners at twelve years of age. The principal bed of this mineral treasure is a mountain between two small rivers, the Kongsberg and the Jordal, which fall from the westward Blee-Field Alps into the

Louven.

CHAP. II. Louven. But the silver is not limited to this mountain; it

extends its deposits for some miles throughout all the adjacent districts: this is proved by the new mines which from time to time have been undertaken in several places. The mine, or shaft, called Old God's Blessing, one of the most antient and most rich, has sometimes within a week yielded some hundreds of pounds of pure native metal. It is nearly two hundred fathoms in depth, and the circumference at the bottom forms a clear space of several hundred fathoms. When Pontoppidan drew up his account of the Kongsberg mines, the annual produce amounted in value to "a tun of gold and a half, and sometimes three quarters." Present Esta- number of the officers of all ranks, the daily miners, labourers, and pensioners, exclusive of their children and families, who had their daily support here, according to the establishment, amounted to near five thousand persons'; and the number of all the inhabitants of Kongsberg, to between ten and eleven thousand souls. To the great number of officers, under the names of Intendants and Assessors, possessing salaries from Government, is owing the vast expense of these works to the nation. These officers, in fact, engross a considerable part of the profits; and if, as it is very possible, their number were to be reduced, the

blishment.

Cause of the loss sustained by Government.

profits

⁽¹⁾ See the Map.

⁽²⁾ Pontoppidan's Nat. Hist. of Norway, vol. I. chap. 8. sect. iv. Lond. 1755.

⁽³⁾ Ibid.

profits from the mines would be more sensibly felt. By dis- CHAP. 11. missing a number of such persons, half of whom can only be considered as drones, and augmenting the number of miners, the working bees,—that is to say, of those actually employed in useful labour,—the finances of the Kongsberg establishment would soon begin to wear a more promising appearance. From the lavish expenditure of the public money, the want of economy visible in every part of the establishment, and the want also of that vigilance which is necessary to prevent embezzlement where precious metal is brought to light in a state actually ready for the mint, it was easy to perceive, during our own examination of what was going on here, that the works were not the property of individuals; but that, as they belonged to the crown, so they were open to all manner of peculation, no one feeling a sufficient degree of interest in their prosperity to prevent waste, or even robbery.

The mountain on which the mines nearest to the town are situate is about 1295 French feet (1498 Danish feet) above Kongsberg, which itself lies 926 feet above the level of the Many of the neighbouring mountains are much higher. The base of those, in general, in which the silver is found, is chiefly hornblende and mica, but the veins of ore are contained in red transition granite. The deepest of the The different Kongsberg mines measures 375 fathoms perpendicular from the surface. The richest of them all now affords very little ore: its appellation is nevertheless curious—" God's help, in time of need;" and it will become "a time of need" in reality to these poor people, if the mines should altogether fail.

No less than 14,000 families are either immediately dependent upon them for their support, or collaterally derive from the mines their means of subsistence. Of this number, 2300 are miners: but there are 7000 families in Kongsberg maintained entirely by the works; and also an equal or greater number in the country, who, either by procuring fuel for the smeltinghouses, or in some other way contributing by their industry to the maintenance of the mining establishment, are entirely indebted to it for a livelihood.

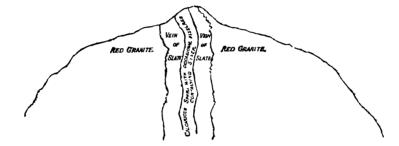
We visited one of the mines which they were now

Approach to the Works.

working. Like the others, its situation is between the rivers we have mentioned in that Alpine barrier of mountains which separate the provinces of Christiansand and Aggerhuus. The approach to the works is by a continued ascent the whole way: and were it only for the striking view afforded, in this ascent, of the town of Kongsberg, the mountains, and the beautiful valley of the Louven, it would be worth the Geological na- journey required. All the mountains, among which the Kongsberg mines are situate, are stratified: the strata occur in regular beds extending from north to south, but having always a dipping inclination towards the east. These strata are moreover intersected by the veins of slate and calcareous spar, which serve as the matrices of the silver ore, in fissures bearing across the strata from east to west, and dipping towards the south. From all this, it would be evident that the whole formation belongs to the class of transition rocks which Von Buch has described as being so remarkable in this part of Norway; namely, transition granite reposing on transition limestone, and being itself intersected by veins

Mountains.

But Von Buch speaks of "the pri- CHAP. II. of slate and limestone. mitive mountains which surround Kongsberg':" and if we were to judge from detached specimens of the red granite, in which the veins of silver are found, we should be disposed to consider this kind of granite as belonging to the oldest We will endeavour to shew, by a Manner in class of primary rocks. rude cut, the manner in which the Kongsberg silver is found. Kongsberg



The more antient or primitive fissures intersecting the strata are perpendicular; but those which are now worked have an inclination towards the south. By the cut here afforded, it will be seen that the silver, as it generally lies, is found in a vein of calcareous spar, and that this again occurs in a vein of schifver of slate. But there is a remarkable leader to the ore, without the presence of which the miners have little hope; namely, iron pyrites and iron oxide: whenever the intersecting fissures contain these minerals, then silver

^{(1) &}quot;The primitive mountains which surround Kongsberg stretch much less southward than we might well believe. Scarcely two English miles down, beyond the Dal-Elv, under the Church of Hedingstad, and before we come to Hellestad, the gueiss disappears under the dark bluish-grey fine granular limestone." Travels through Norway, &c. p. 419. Lond. 1813.

CHAP. II. silver is found; but if the pyrites and the iron disappear, the silver also fails; which is a very remarkable fact, as connected with the history of mining. Every thing indeed belonging to the nature of these mines is worth the most scrupulous attention; because mines of native silver, although not unfrequent in America, are the most rare in Europe: and among the very few instances in which such a deposit has been observed, this of Kongsberg is the most conspicuous. When we came to the mouth of the shaft, a basket filled with the ore had just then been raised, which we eagerly It consisted of native silver, disseminated in examined. laminæ throughout masses of limestone spar, with dark veins of schistus; containing, in some instances, sulphuretted silver, and sulphate of barytes: the specimens were poor in precious metal, but served to give some idea of the produce of the mine; which is now an ore almost too poor for the operation of stamping; and now so rich, that the silver, as if it had been fused and drawn out into threads and capillary fibres, is seen a native masses, protruding beyond the surface of the Sometimes the most beautiful arborisations, as they stone1. are called, of the native metal, are exhibited by contiguous crystals of native silver, in octahedral and in cubic forms.

Descent into the Mine.

We descended into the mine by means of ladders, as into the Cornish mines; being everywhere struck by the proofs of the same inconsiderate expenditure of the public money, and

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⁽¹⁾ See the Vignette to this Chapter; made from a specimen now in the author's collection, which he brought from the Kongsberg mines.

the same waste among the works. There can be little doubt CHAP. 11. but that these mines would become very profitable, if they were in private hands: and perhaps the best thing the Government can do, is to farm them out to individuals.

Besides native silver, these mines produce that very rare substance, the native electrum, or auriferous native silver. We found it a very difficult thing to procure any tolerable specimens of this curious native alloy of gold and silver. When it occurs, the metal has a brassy aspect. We had a specimen of it, which we analyzed, containing, besides silver, nearly thirty per cent. of gold. Like the native silver, it is found in laminary and capillary forms; and sometimes, but very rarely indeed, it is crystallized in cubes. The other minerals found here are noticed below, in the note*: with the exception of the ores of copper, the specimens of which are exceedingly rich; but they are not sufficiently. abundant to make this metal an object of research, otherwise than for the silver with which it is combined.

We

^{(2) 1.} Sulphuret of silver, massive and crystallized.

^{2.} Red antimonial sulphuret of silver, ditto.

^{3.} Argentiferous sulphuret of lead.

^{4.} Sulphurets of copper and iron.

^{5.} Sulphurets of zinc, brown and yellow.

^{6.} Fluate of lime, of various colours.

^{7.} Lime spar, in great variety of forms.

^{8.} Quartz, ditto.

^{9.} Sulphate of barytes.

^{10.} Comolite, or pot-stone.

^{11.} Asbestus, in the forms of mountain-leather and mountain-cork.

^{12.} Anthracite.

^{13.} Iron ores-magnetic iron-loadstones, &c.

⁽³⁾ It is nevertheless collected, after being separated, and in considerable quantities, from the basons in the smelting-works: the pure copper being made into cakes of the same size and form as are those of the silver.

We descended into the mine by ladders nearly perpendicular; meeting with occasional landing-places, in our way down. At the depth of a few hundred feet, the veins of silver were occasionally pointed out to us; but those which we saw were so poor that they could scarcely be discerned by any but a miner's eye. The richest veins are those which dip towards the south: and they are especially rich when they occur associated with the sulphuret of iron, or pyrites; called, by our Cornish miners, Mundic. The ore, and all the rubble of the mine, were drawn up by a water-wheel, at the distance of four or five hundred yards from the mouth of the shaft; the communication being carried on the whole way by cumbrous machinery. From the spot where this shaft has been opened, we had a fine view of Kongsberg and of the surrounding country.

After a most laborious investigation of the different parts of the mine,—which only served to convince us, as it often happens to travellers, that as much knowledge of the real nature of these sulterraneous deposits may be obtained by studying the ores above ground,—we were again conducted to the surface. It was here we saw, for the first time, a mineral, then rare in cabinets of mineralogy, but which has since become very common; namely, anthracite, or native mineral carbon, which frequently occurs in the Kongsberg mines, associated with the silver ore. That a substance so nearly related to diamond, containing the same elementary body, almost in a state of equal purity, should externally resemble a piece of common pit-coal, will not appear so surprising as it might otherwise do, when we know that the diamond itself has been found to

exhibit

Native Mine-

exhibit a similar appearance: but it may serve, among many CHAP. II. other phænomena, to manifest the absurdity of ascribing the presence of carbon and its compounds, when in a mineral state, and in primary and transition rocks, to the decomposition of vegetable matter. It would be a much wiser way of reasoning upon the operations of nature, if we were rather to consider the vegetable produce of the earth as deriving its existence from the minerals which supply it with the alimentary principles of life. The only difference between anthracite and bituminous coal is, that, in the first, carbon is almost in an uncombined state'; whereas, in the second, it has entered into combination with one of the constituents of water; in which state it may very possibly mineralize wood, or any other organic body, just as they become mineralized by other native compounds;—for example, by the hydrates of silica. But to infer from such accidental circumstances that the native compound has owed its origin to a change sustained by the vegetable body, is taking too narrow a view of the subject, and building a theory upon fortuitous

⁽²⁾ The following analysis of conchordal anthracite will be found very nearly to agree with that of the native mineral carbon of Kongsberg:

Carbon	-	•	-	-	96		66
Alumina	-	-	-	-	2		0
Silica and	iro	n	-	-	1		33
						_	

⁽¹⁾ Opake jet-black diamonds, although rare, are known to diamond-merchants; and the black flaws or specks, which are sometimes seen in diamonds, are nearly allied in their nature to anthracite.

Crystallized Native Silver.

fortuitous and partial phænomena'. We were surprised at the difficulty we experienced in procuring fine specimens of the native silver; but it seems they are sent, as soon as found, by the Assessors, who have the first selection, to the dealers and principal collectors in Copenhagen; insomuch that the resident mineralogists at Christiania, and even at Kongsberg, are under the necessity of procuring their own specimens, at very advanced prices, from that capital. Our good friend Dr. Müller, by his acquaintance with a widow of one of the Assessors, obtained for us permission to purchase a few varieties; in some of which, the crystals of native silver were very perfect, and in the octahedral form. There are few things less obvious in the natural history of minerals, than the manner in which Nature conducts her operations for the developement of the native metals; although there be evidences which tend, at least, to prove, that these phænomena result from the decomposition of ores by chemical affinities. Capillary native silver is often a result of the Jecomposition of the sulphuret of silver; and in the Hungarian mines it is found upon decomposing sulphurets.

Native

⁽¹⁾ Among the absurdities urged in support of the vegetable origin of coal, is that of wood thus mineralized by the bituminous body. The author was once directed to a specimen of fossil timber, part of which was of coal and the rest of wood, as to a proof that the origin of pit-coal was thereby plainly demonstrated, and that it was owing to decayed vegetables. With just as much reason did the French Savans insist upon deriving all the aluminous rocks of the globe from decomposed plants, because the impressions of the leaves of ferns are seen in slate; and all the limestone from the decomposition of animal bodies, because it contains the impressions of shells and other organic remains.

Native silver is also developed in the Peruvian mines, by the CHAP. II. action of iron and other metals upon the muriates of silver. The same may be said of the development of native gold, which results from the decomposition of the sulphurets; as may be proved by the action of heat upon the auriferous ores of tellurium, and by the spontaneous decomposition of the auriferous sulphurets of iron found in the mine of Berezow, in Siberia. But then the ciystallization of these metals!—the perfect crystalline forms assumed by both of them! by the native silver at Kongsberg! and by the native gold of Hungary and of the Brazils!—how are these phænomena to be explained; without supposing that the two metals have been previously held in a state of solution, and that the crystals have been deposited from a liquid state; being held in solution, either by the fluid matter of heat, or by some other fluid? "The particles of bodies," it will be urged, "in order to crystallize, must be at liberty to move;" all of which is very easily said, and is, perhaps, after all, mere notions entersophistry; it having been already proved, and beyond dispute, regard to the in another part of these Travels, that the particles of precipitated bodies, or sediments, do combine according to the laws of cohesion; that is to say, do assume the utmost regularity of crystalline form and structure; the most perfect symmetrical arrangement; and even change from a state of opacity, to a certain degree of transparency (as in the example of the

Erroncous

from

tained with crystallization of Minerals.

(2) See Part II. Sect. II. chap. x. p. 410. Lond. 1814.

crystallized alabaster of Antiparos), after the original deposit

from the fluid state has taken place, and in cases where the molecules were precluded from the possibility of motion. These are surprising facts: and they deserve the more attention, because, as they seem to militate against the theory which has been long established respecting a regularity of structure in minerals, so they may perhaps serve to explain, whenever they are satisfactorily accounted for, the hidden laws by which crystallization is effected.

Metallurgical operations for the treatment of the Kongs-berg Ores.

Upon our return to Kongsberg, we visited the smeltinghouses, and inspected the metallurgical operations for the reduction of these remarkable ores. The process is very simple: it is that which the French writers call imbibition, by means of lead. They melt together, in nearly equal parts, lead and native silver, divested as much as possible of its matrix; and thereby obtain an alloy, consisting of lead, combined with from thirty to thirty-five per cent. of silver. The lead is afterwards separated, by the usual process of We were amazed at the facility with which all cupellation. manner of persons obtain admission to these works, when the rich ore brought from the mines is lying about in heaps, covering the floor. Persons disposed to pilfer, would find no difficulty in removing large portions of it. The ore is of four kinds; which severally bear the following appellations:

- 1. Gedieget Sölv.
- 2. Meddel Ertz.
- 3. Skeide Ertz.
- 4. Slig.

The

⁽¹⁾ See "Traité de Min. par Alexandre Brongniart," tome II. (Article Métallurgie), p. 337. Paris, 1807.

The first of these consists of pure native silver.

CHAP. 11.

The second of native silver, with a portion of stony matrix; i.e. lying in laminæ, which cannot be altogether separated from the mother-rock.

The third of a poorer ore, in which only detached specks and minute grains of native silver are visible.

The fourth, of the sand and rubble of the mines.

The two first, that is to say, the richer ores, are smelted with the greatest facility, being only mixed with a proportionate quantity of lead; but the two last, whose manipulation constitutes the principal work of the furnaces. requires a longer process, which we shall now describe. The slig is mixed with pyrites, and smelted; when the latter enters into combination with the silver, forming a sulphuret: but the superfluous portion, during this process, becomes slag, and is separated. This mixture of silver with pyrites is called raasten. It is then calcined, by which process the volatile part is sublimed. After calcination, the raasten is mixed with skeide ertz, with a portion of the richest slig, and also with a small quantity of slug; and these four ingredients are then smelted together. When in a state of fusion, the whole is suffered to run into a bason, where it is further mixed with lead, which combines with the silver. Afterwards, the alloy is removed to another furnace; in which. as the lead rises to the surface, it there floats, and is gradually drawn off. Then the silver undergoes the last process; in which, by the degree of heat communicated to the mass, it becomes divested of any small portions, either of lead or of copper, which may remain.

The business of mining is confined to the same families: no strangers are allowed to work. There is generally employment for the children of the miners, at an early age. They are now, however, increasing rather faster than the employment for them. We saw many children in the streets, and much apparent distress and poverty; many beggars, both of children and grown persons: but the houses were tolerably neat.

Public Seminary for Mineralogy.

Professor Es-

There is a Public Seminary at Kongsberg, in which Lectures on Mineralogy are delivered by Professor Esmark, who is also one of the Assessors, and the most scientific mineralogist, perhaps, in all Europe. This gentleman is well known in all Foreign Academies, for the works which he has published. He has done more towards the overthrow of the wild systems of the Plutonists than even Werner himself; and this simply by his own personal observations in his travels; by opposing the results of actual experience, and matters of fact, to mere visionary and speculative opinions. It was he who discovered pumice and obsidian regularly stratified in porphyritic rocks; thereby refuting the notions that were entertained of the origin of such phænomena by means of volcanic fire; and as satisfactorily accounting for their formation by the humid process, as did the discovery of a cave in Iceland with dripping stalactites of obsidian pendent from the roof. Dr. Müller introduced us to this gentleman. His collection of minerals is one of the most geognostic we

ever

ever saw; and it is filled with specimens tending to illustrate CHAP. II. the real origin of the substances which have been improperly termed volcanic. He exhibited to us masses of porphyry containing imbedded layers of obsidian; and this, again, containing pumice; together with a regular series of transitions, shewing by what changes obsidian passes into the state of pumice. Considering trap as a generic name applied to a great variety of rocks, especially those of porphyry, the Professor comprehended under this genus, schistus, and all the rocks called schifver by the Germans, and many of the substances which, owing to their porous aspect, are often considered as lavas; for example, mandelstein, or almondstone, of which there are so many varieties in the islands of Rum and Skye, in the Hebrides, containing zeolotic nuclei; and all the basaltic porphyries of Drammen, with which mandelstein is found, as it is also in Hungary and Transylvania. Upon examining the basaltic porphyry of Drammen with a lens, we perceived that it was full of small spheroïdal concretions, like those which appear in the basaltic rocks of Canna in the Hebrides, and which have been by some travellers ascribed to an igneous operation. Professor Esmark conducted us to the collection of grand chamber of the Kongsberg Academy, where we saw a longing to the collection of minerals, in beautiful order, and most scien- Academy. tifically arranged. The very sight of such a collection affords of itself an edifying lesson for mineralogists; but we were willing to forego some of the advantage which might be derived from its inspection, that we might enjoy the valuable conversation of the Professor. From him we learned, that the School of this Academy is a Royal Institution for the VOL. VI. instruction

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Minerals be-

instruction of the children of the miners, in mineralogy, chemistry, physic, mathematics, and other branches of science. There are three Professors, among whom Professor Esmark holds the mineralogical and geological department. Any of the miners, or children of the miners, may attend this institution. Two days in every week, and two hours in each day, are dedicated to the instruction of the miners, and all other persons who choose to attend. For these lectures, no PAYMENT WHATSOEVER IS REQUIRED. Of the advantages of such an institution, where there are profitable mines, it would be vain to attempt to speak. We felt, at the moment, an inward sense of shame for our own country, in which such studies have hitherto met with so little encouragement. We could but turn our thoughts homeward, and ask, what the Government of GREAT BRITAIN had ever done towards the advancement of mineralogical knowledge. At this moment there was not a single Professor of Mineralogy in any of our Universities: and it will be long indeed before the eyes of pedants, who bear so much sway in our places of public education, will be open to the importance of establishing Schools of Mineralogy. The very science itself, and all that belongs to it, is to them as a sense which they never enjoyed: whence it follows, that to reason with such persons of its advantages, is like talking of the blessing of light to one who has the misfortune to be born blind.

The

⁽¹⁾ These reflections are given as they occur in the author's Journal. They will, he hopes, be read with a reference to the time in which they were written. A very considerable alteration is now beginning to take place with regard to the study of mineralogy

The appearances of squalid poverty which disgrace the CHAP. II. streets of Kongsberg were before alluded to: this place, like Christiania, swarms with beggars; who beset the door of the inn at which travellers arrive, forming together a mob of most disgusting objects; each endeavouring to extort money, as in France and Italy, and as it used to be in Ireland. especially in the streets of Dublin², by exposing to view distorted limbs, and deformity, and open sores; thrusting these revolting sights in the very faces of every stranger. they meet. We were glad to get away from them; and set out again for Christiania; returning by the same road that we came, and sleeping the first night at Drammen.

In the church-yard at *Drammen* we observed that almost every grave was covered with a bed of flowers. Müller told us, that, in the summer season, these flowerbeds upon the tombs have a very pleasing appearance; and that it is also customary, during the summer months. to scatter flowers upon the tombs. There is every reason Customs, to believe that the same customs prevailed among all the commonorigin ancient families of the Goths and Getæ, and their descendants: and Greeks. because they are so strictly Grecian. Offerings of flowers were among the honours paid to the dead in Greece; and we have before noticed a similarity of customs between the antient Greeks and the present Norwegians, in describing the marriage-

shewing the of the Teutons

mineralogy in Great Britain: but it is not too much to say, that the prodigious source of wealth which its due encouragement might open to our nation has not yet been adequately weighed by our Rulers. There is not one school established for the instruction of miners, in any of our mining districts.

(2) This nuisance in Dublin has been lately put a stop to.

marriage-ceremonies of the latter. So, with regard to this practice of strewing the places of sepulture, we find that it was customary to strew the *Grecian* tombs with herbs and flowers; with amaranths, with roses, with myrtle, and most profusely with parsley. Future travellers, pursuing this subject of the common origin of the *Teutons* and *Greeks*, will, in all probability, have to notice other more remarkable points of coincidence.

. There are many good houses in Drammen. The whole

Superiority of the *Norwegian* Women.

valley from Hogsund to this place is beautiful, and the soil seems very good. The mountains are covered with firs. We met a great number of fine-looking country girls upon the road; most of them above the ordinary stature, and very handsome. In Sweden, we had remarked that the men were much superior to the women; but here we should make the contrary observation, and particularly among the higher classes. At Christiania we had met with many elegant-looking women; but scarcely any among the men, excepting the Ankers, who, being natives, had the air of gentlemen. The custom of smoking, so universally prevalent, greatly contributes to their slovenly and dirty appearance. As we proceeded in our journey, we observed that most of the houses have little porches, which are generally

⁽¹⁾ See Part III. Sect. I. ch. xvii. p. 643. Lond. 1819.

⁽²⁾ Philostrat. Heroïc. cap. 19. p. 741.

⁽³⁾ Anacreon. Od. liii. 25. Aristænet. I. Ep. 36. p. 162.

⁽⁴⁾ Euripides, Electr. v. 323.

⁽⁵⁾ Polyan. Stratag. v. 12. sect. 1. Suidas, in voc. Σελίνου στέφανος.

generally ornamented with boughs of birch or of fir. CHAP. IL The country women, when engaged in their labours,—and. they work harder than the generality of the men in our country,—wear nothing upwards but their shifts, which however are made higher than in England. Sometimes a coloured handkerchief is thrown loosely over their shoulders; but they have no stays, nor any other covering for the waist. The women, in many parts of Sweden, work in the same attire, and look exactly like men toiling in their shirts.

Near Drammen, that elegant plant, the Linnæa Borealis, may Medical probe found in great plenty at an earlier season of the year. flowers, at this time, were all gone, but we found the remains of its seed-vessels in sufficient abundance to testify its situation here. It flowers in Norway in the months of June and July. Its medical properties are mentioned by Linnæus; but according to Gunner, whose Flora Norvegica was printed at Trönyem in 1766, the inhabitants of that city make use of an infusion of the Linnæa Borealis as an antidote in fevers. The same author also speaks of it as affording a remedy in other disorders. The Norwegians call it Norisle; Noretle; and Narisle-grass.

The food of the labourers who work for gentlemen, or large

^{(6) &}quot;Nidrosienses infuso contra febrem scarlatinam, vernacula Narisle (Norisle, Noretle, vel Narild) non sine salutari effectu utuntur. In Norvegia Australiori decoctum in usu est contra scabiem. Externe etiam vel fotu vel fumo febrem scarlatinam tollunt. Svecis foliorum infusum cum lacte specificum est in doloribus ischiadicis et rheumaticis, et fotu dolores pedum in ovibus tollunt." Flora Norvegica Gunneri, lxvii. p. 37. Nidrosiæ, 1766.

the Peasants.

CHAP. II. large farmers, in this country, consists of black rye-bread Condition of and salted butter or cheese, for breakfast; and boiled barley and a herring, or some other fish, with beer, for dinner. Once in a week, and sometimes twice, they have fresh meat. The common people in general live nearly in the same way, only not quite so well. Instead of beer, they have sour milk. Some, who have large families, are often in great distress. The men who work for gentlemen, or farmers, have generally a house found for them, rent free; for which they are always obliged to work for the master from whom they receive it, in preference to any other. These receive ten-pence a day in summer, and eight-pence in winter; and, in harvest, a shilling, or fourteen-pence. Those who have no houses, are paid a shilling in summer, and ten-The state of the labouring poor is pence in winter. improving in Norway: they are not so dirty as they used to be; and, consequently, there are not so many children who die young.

> There is not a pound of fresh butter to be bought in Christiania. All persons use what they make themselves, or they salt it for keeping. The farmers who live higher up the country, go for two months, from June to August, up the mountains, to pasture their cattle. They then live in little temporary wooden sheds; and it is during these two months that they make the greatest part of their butter, which is salted, and brought to the fair at Christiania, in the winter, upon sledges. This butter is bought by the families in the neighbourhood, for the use of their servants; but the better sort of people eat the butter imported from Holstein.

So little has the custom of selling fresh butter prevailed, CHAP. IL. that if a person wished to dispose of any, he would hardly The cattle, during winter, besides hay find purchasers. and straw, where these may be had, are chiefly foddered with the leaves and small branches of a species of poplar, gathered at the end of the summer, and stored for winter provision. We were assured by persons who had most attended to the keeping of cattle, that these leaves, stripped from the branches, are excellent food for horses, and that this kind of fodder gives them a very fine coat. By all that we could hear or see, the lower orders appeared to live as. well as those in England; with this difference, that they eat rye-bread instead of wheaten-bread: but they are so accustomed to rye-bread, that they prefer it to that which is made of wheat, and reckon it a heartier food. Wheat is sometimes cheaper than rye. A flat cake, much in use, which is made of rye, and sometimes of oatmeal, is called flad brü. the neighbourhood of Christiania the house-men have seldom land to keep a cow. Among the higher orders, the business of housekeeping, from its peculiar nature, and the largeness of the establishments, takes up so much time, that the mistresses of families, after their marriage, have no leisure to attend to any thing else. The number of servants in these families is always great; and those servants are, for the most part, an idle set, never liking to do anything out of their peculiar department; which is, in fact, the principal reason why so many more servants are required than would be wanted in England for the same work.

In our return to Christiania, we visited the Alum Works, Alum Works. which

Synthesis which takes place in the production of Alum. which are near the town; and their inspection only served to convince us of what we had often suspected, from the sight of alum-works in our own country; namely, that alum is the result of a synthesis which takes place during the decomposition of the substance considered as its ore: that is to say, that alum does not exist ready formed in the schistus and other mineral aggregates from which it is supposed to be obtained; but that these rocks being exposed to decomposition by the action of extraneous bodies, a new chemical combination takes place, which is exhibited in the salt called alum. As the subject is really curious, its illustration, as applied to a description of these alum-works, will not be irrelevant. They belong to Mr. John Collet, whose hospitality we had lately occasion to notice. The sort of slate called the ore is a dark schistus, distinguished from clay-slate. by its streak always remaining unaltered in its colours. In its exfoliations, it separates with polished surfaces, having a higher degree of natural lustre. Its dark colour is entirely owing to the bitumen which it contains; but it also contains embedded nuclei of iron-pyrites. The workmen affirm, that the ore is richest when these nuclei are most abundant; and the reason why this pyritous slate is fitter for making alum, we shall presently shew. If a piece of this slate be submitted to analysis, when taken from its native bed, it will not be found to contain alum: hence it is evident, that the alum is, as to its formation, the result of a subsequent process,

⁽¹⁾ See Jameson's Mineralogy, Vol. I. p 433. Edin. 1816.

process, which takes place in the following manner; some- CHAP. II. thing of a similar nature being applicable to all other works carried on for the same purpose of extracting alum. The ore containing the elementary constituents of alum, when it has been taken from the alum-rocks where it occurs in veins, is disposed in heaps: here, being acted upon by air and moisture, a spontaneous decomposition begins, which is from time to time aided and accelerated by water, and also by urine cast upon the heaps. The iron-sulphuret, thus acted upon by moisture, also undergoes decomposition. As this decomposition commences, the pyrites becomes heated: the sulphur which it contains becomes sulphuric acid; and this acid entering into chemical union with the alumina of the decomposing slate, and the alkali of the urine, an alkaline sulphate of alumina is the result, which is, in This salt then begins to appear, in fact, the alum. white delicate fibres, between the exfoliating laminæ of the slate. For its separation, and also to further the progress of decomposition requisite in effecting this synthesis, other operations are necessary: and wherever alum-works have been established, the process is nearly the same;—that is to say, the ore is calcined; and the particles of alumina, being reduced to a state of greater division, are the more readily acted upon by the acid. It is then lixiviated, or soaked, for a certain time: after this, the liquor, being separated, is boiled in leaden caldrons, and suffered to evaporate: the concentrated solution containing the salt being then collected into pans, deposits the alum, as it cools, in large and beautiful octahedral crystals, or two tetrahedral crystals VOL. VI. L

CHAP. II. crystals applied base to base. Commonly, however, only one tetrahedral pyramid appears as the crystalline form; the pyramids being constantly turned downwards towards the bottom of the vessel, especially those which fix themselves to the rods which are put into the liquor to multiply Sometimes the angles of the crystals are the surfaces. truncated; and these truncations take place most frequently when the lixivium is slightly acid. We had never seen such fine crystals of alum as those which we brought from this manufactory. To obtain a good crystallization, some precaution is necessary in attending to the degree of heat applied for the concentration of the lixivium. liquor be urged by a violent degree of heat, it loses part of its acid, becomes tasteless, and the residue is then no longer susceptible of crystallization; but the alum is precipitated, in the form of a very fine adhesive powder, in proportion as the water is dispersed by evaporation. To ascertain this temperature, methods of greater or less accuracy have been adopted; such as the immersion of an egg into the liquid; the affusion of some drops of the lixivium upon a plate; and some other'. We brought away many specimens, both of the ore and of the The balls of iron-pyrites contained in the slate have a spheroidal form; and, in some instances, these balls are as big as a man's head.

Return to Christiania.

After our return to Christiania, the same round of hospitable entertainments again took place which we have before noticed.

⁽¹⁾ See Chaptal's Chemistry, Vol. II. p. 64. Lond. 1775.

noticed. We were not a single day in the place without CHAP. II. receiving invitations, either to some magnificent dinner or supper. There are public balls on a Sunday evening, once Public Balls. in every fortnight. These are held in a large room belonging to the principal inn; and the ball is followed by a supper. Tickets are given to the different persons as they enter, to regulate their places in the dance; a different set of tickets being distributed for a similar purpose at supper. The dances are, the waltz, which has always the preference, and the common English country-dance: but even in the country-dance the waltz is introduced: indeed it is so great a favourite, that our English dance would probably not be tolerated, but in compliment to the English who may happen to be present. Some of our popular dances were performed by the band, but in so slow and solemn a manner that the effect became truly ludicrous. dresses of the women are entirely English, and of the latest Rage for ton. At this time, the Governor's lady, and one or two Fashions. more, made their appearance in curled crop perukes, imported from London; and by the buzz, which the display of the new fashion excited, the admiration and the envy it called forth, it was evident that a fresh importation would soon be the means of making these wigs avery general costume among the higher class of females. Any alteration that takes place in London, with regard to dress, is instantly transmitted to Christiania: and these changes are watched and adopted in Norway with a degree of avidity which is quite amusing to foreigners. Nothing would be easier than to practise

CHAP. II. practise the most extravagant hoax, by making it to be believed that some strange grotesque mode of attire had been introduced among the fashionable belles of London. If a lady arrive from England, she has hardly set, foot in Christiania before her toilette is beset by all the principal women, anxious to inspect and to imitate every article of her apparel.

Further Account of Bernard Anker.

Literary female characters are unknown: even the men rarely pretend to follow any scientific pursuit. The most learned of the inhabitants are foreigners. Bernard Anker was almost the only man who, as a native, engaged in and patronized literature. He was familiarly acquainted with the best English authors in almost every department of science, and not ill versed in the writings of other nations. He had, at the same time, some degree of knowledge of the antient classic authors. He was, indeed, in all respects, a Some travellers have spoken very extraordinary man. of his vanity: to us, this foible, if it deserved so harsh a name, selved only to render his company the more amusing: not that we were amused at his expense, but because we discerned, through all his supposed egotism, a playfulness of disposition, which seemed to say, "I will be any thing, from the loftiest statesman to the merriest member of a party at blind-man's buff, sooner than my guests shall suffer ennui for want of conversation or amusement!"—and we felt convinced, that the loss of such a man, in such a place as Christiania, could never be supplied.—Alas! before our tribute can be paid to his distinguished worth, and these acknow-

acknowledgments of the kindness we received from him pub- CHAP. II. lickly rendered, this loss has been sustained!-Of the extent of his commercial speculations it is hardly possible to convey an idea, without making a complete statistical survey of the commerce of Norway. His ships went to sea in whole fleets; and of the wealth of their freightage some notion may be entertained, by an account of his dealing in a single export; namely, timber. He took us to see his deal-yards, which Timber Trade. were indeed prodigious. The present stock in them was worth 50,000l. From Christiania and Moss he exported deals to the amount, annually, of 180,000l.; and of this sum, above 100,000 l. must be placed to the amount of the deals from Christiania. The deals that are sold in one year are cut three years before; and, as every thing is paid for in ready money, an immense capital is required to carry on this trade in deals alone; which is, in fact, the reason that it is so profitable, and in such few hands. At Frederickstadt, from the facility of floating the timber to the saw-mills, and from the saw-mills immediately to the port, a whole year is saved, and the clear profit is thereby made much greater. The timber that comes to Christiania is brought by sledges, in winter. The carrying timber on sledges forms one of the principal winter employments of the farmers and house-men. By this it will be seen what the out-goings must have been of a merchant, engaged as Mr. Anker was, in commerce. But, besides this, he had extensive iron-foundries, and three copper-mines. The number of his stewards, or clerks, amounted to forty; each of whom, upon an average, enjoyed a yearly

CHAP. II. a yearly salary of a thousand dollars. Yet, in the midst of his vast undertakings, he was so much of a philosopher, that if he could have found any other individual capable of superintending the whole, he would have consented to a loss of 50 per cent., that he might have been able to retire.

State of Religion in Norway.

Of the state of religion in Norway we had not an opportunity of making many observations. The morals of the people, especially of the lower orders, are good; and thus judging of the tree by its fruits, we saw no reason for complaint. Formerly there were many different sects in the country; and among these, some like our Methodists: but at present, all are united. There is nothing, therefore, of that sourness which is caused by dissent; and which, as it tends to separate the members of society from each other, tends also to sap the very foundations of Christianity;—thereby proving the truth of an observation of Montesquieu', that "the most true and holy doctrines may be attended with the very worst consequences, where they are not connected with the principles f society." One of the most essential objects of religion, when a State has many causes for hatred, is to produce many ways of reconciliation. Perhaps we ought to assign as a reason for the religious unanimity of Norway, that the same degree of ardour in religious matters which is found in our own country, and which in Great Britain has of itself given birth to the schisms that divide the members of

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⁽¹⁾ Esprit des Lois, liv. xxiv. ch. 19. p. 161.

its Christian community, has not yet been excited here. CHAP. II. A great deal of what may be called indifferentism prevails on religious subjects among the Norwegians.

Upon the 28th of October, after taking leave of many of the inhabitants, Mr. B. Anker accompanied us in a boat round the Bay. We visited the fortress, and saw the slaves at Fortress of work. This fortress is almost impregnable by land. We were much delighted with the view of the river and the country from the ramparts. The water is so land-locked, that its appearance is that of a fine extensive lake, ornamented with islands, and surrounded by blue mountains in very pleasing shapes: but as far as we could judge of their elevation by the view of them, they have not the height of the mountains which surround the lakes of Westmoreland and Cumberland. The fortress seems to be strong; and there are some fine brass cannon upon the ramparts. The garrison consisted of twelve hundred men, including some chasseurs; and there were, besides, four companies of artillery. Afterwards, having dined privately with Mr. Anker, we retired with him to another apartment, where an elegant dessert had been set forth in the English way, with decanters of wine and glasses. We conversed with our intelligent host respecting the mines we had so lately visited; and he presented to us a specimen of native gold, found at a mine belonging to himself at Nummedalen, near Kongsberg. In the evening, to gratify our curiosity, he put on his magnificent winter-dress, consisting of a pelisse, collar, and boots, of the choicest black furs. The pelisse was made entirely of the skins of sables, and the collar and boots of bear's skin. We had examined

CHAP. II. the fur-shops, in the hope of finding the skins of the Cat-Gaub, or Norwegian Lynx; but the animal, although sometimes taken, is certainly very rare in the country; and it is fortunate for the inhabitants that its visits are not more frequent. We spent the last evening of our stay in Christiania with this benevolent man; and having supped with him in the presence of his family, bade them farewell.



CHAP. III.

FROM CHRISTIANIA IN NORWAY, TO FAHLUN IN SWEDEN..

The author again sets out for Sweden-Execrable state of the Roads before the snow falls—Holen—Change in the Roads in approaching Sweden-Spires of Norwegian Churches-Kiölstad-Hæberg-Cataract of Fon Fossen—Ous—Sindby—Appearance made by a Fair at Kongswinger-Money of the Country-Edsbroen-Magnor-Boundary between NORWAY and SWEDEN-Singular instance of honesty in a Peasant-Morast-Haga-Strand-Homeric Torches - Extraordinary Costume of the Natives of WERMELAND -Aspect of the Country - Consequences of a recent Dearth-Hogsalla-Leerhol-Skamnäs-Improved appearance of the land—Carlstad—Exports and Imports—Population—River Clara—Brästegård—Molkem—Change in the dress of the Peasants -Manner of keeping the Roads in repair - Brättefors - Boulders -Trees—Animals—Philipstad—Uniform appearance of the Swedish Towns-Dress of the Natives-Enclosures-Juniper-trees-Onshytta -Two species of Tetrao or Black-cock-Persberg-Descent into the VOL. VI. IronIron-Mines - Catastrophe which befell a Female Miner - Bottom of the Persberg Mine-Striking scene in the Great Cavern-Imbedded state of the Ore—Långbanshytta—Machinery for the Mine Pumps— Saxån—Westmania — Hälleforss—Nytorp — Nyakopparberg -Minerals-Laxbro-Beauty of the Lakes-diminution of their waters - Hogforss - Hellsion - Ostanbo - Smedbacka - Blood Cakes—Entrance of DALECARLIA — Varieties and Luxuriance of the Fungi and Musci-Bommarsbo-Home Manufacture of Candles -Russ-Gården-Naglarby-General Features of DALECARLIA-Character of the Natives-Dialect-Antient Dance-Original use of the Runic Staves—Retreat of Gustavus Vasa -Approach to Fahlun—External Aspect of its famous Copper-Mine.

СНАР. 111.

for Sweden.

Execrable state of the Roads before the snow falls.

In the morning of the 29th of October, we left Christiania The author again sets out in our phaeton, and once more began our journey towards Sweden. For this purpose, it was necessary that we should retrace our former steps as far as Moe, before we took a different route; but the roads were so execrable, that we were actually employed the whole day in getting to this place. although distant only three Danish miles and a half from Christian a. We passed through a beautiful valley between Romsaas and Schesmoe, as before. The inns were bad; and this being added to the wretched state of the roads, and the little progress we were able to effect, made us think that we had acted perhaps unwisely in not waiting for the winter season, which is the best time for travelling in Scandinavia, especially when the country is not likely to offer any thing in its scenery remarkable either for its grandeur or picturesque beauty. When the snow has once fallen, and the sledgeway is open, a traveller, wrapped up in his furs, may prosecute his journey in the open air, not only with the utmost expedition,

expedition, but with comfort. But we intended to visit CHAP. III. mines; and, in our search for minerals and plants, wished to see as much as possible of the uncovered earth before the woodlands of *Norway* and *Sweden*, their hills and their valleys, rocks, mountains, lakes, and rivers, were all shrouded in one vast sheet of ice and snow.

The next morning, Oct. 30, after a stormy night, dawned most merrily; the sun burst forth in splendour;—even the feathered songsters, in this autumnal day, were still heard upon the dripping branches:—

- "And forth they passe, with pleasure forward led,
 Joying to heare the birds' sweet harmony,
 Which, whilom shrouded from the tempests dred,
 Seem'd in their song to scorne the cruell sky.
 Much can they praise the trees so straight and hie,
 The sayling pine, the cedar proud and tall,
 The vine-prop elme, the poplar never dry,
 The builder oake, sole king of forrests all,
 The aspine good for staues, the cypresse funerall.
- "The laurell, meed of mightie Conquerors
 And Poets sage, the firre that weepeth still,
 The willow, worne of forlorne paramours,
 The eugh, obedient to the benders will,
 The birch for shaftes, the sallow for the mill,
 The myrrhe sweet, bleeding in the bitter wound,
 The warlike beech, the ash for nothing ill,
 The fruitful olive, and the platane round,
 The carver holme, the maple sildom inward sound."

In our first stage, this day, to a place called *Holen*, we turned *Holen* out of the *Tröngem* road, about half a mile from *Moe*, into another, upon our right, leading towards the frontier of Sweden:

Roads in anproaching Sweden.

CHAP. III. Sweden: and we could but remark, at the time,—as if any-Change in the thing which had a reference to that country should in some degree manifest a Swedish aspect,—that, from the moment this deviation occurred in our route, the roads began to improve; becoming better and better afterwards, as we drew nearer to the Swedish barrier. The country here is pretty well cultivated: although undulant, when compared with the rest of Norway it is of a level nature. The road lay partly through forests. In viewing the churches of this country, if we might judge from mere similarity of form and structure, it would seem that all our spires, commonly called Gothic, with the fashion and shape of their wooden shingles, were borrowed from Norway. In every part of this country through which we have passed, they reminded us of England.

Spires of Norwegian Churches.

Kıölstad.

From Holen to Kiölstad, one Danish mile and a half, we journeyed over plains with good roads. The oats and pease were still standing. We observed near Holen several heaps, which we thought were antient tumuli; but could obtain no information, either from the tradition of the inhabitants, or from the history of the country, to confirm us in this belief. Before we reached Kiölstad, the prospect of an extensive rich level, highly cultivated, reminded us of parts of Surrey. From Kiölstad, where there is a good inn, we proceeded to Hæberg, through a level country, having crossed a ferry. Near Hæberg there is a Cataract, which we had every reason to believe would be well worth seeing: but the storm came on again; the rain fell in torrents; and the mud was so deep, that we did not attempt to gratify our curiosity. The people

Hæberg.

Cataract of Fon Fossen.

at Hæberg told us that it was about an English mile distant, CHAP. III. and yet we heard distinctly the noise of its falling waters. This cataract is called Fon Fossen. They said that passengers seldom went to see it; which is probable enough in a country where the grandest cataracts are things of common occurrence: but it is to be hoped that some future traveller, under more favourable circumstances, will not leave this water-fall unheeded. In going from Hæberg to Ous, we our. found the soil sandy. The inn at Ous was excellent, and the accommodations not inferior to those of Christiania; which is saying a great deal. We seemed to have escaped from the mud the moment we quitted Hæberg; for the road afterwards was very good. Here we observed some hardy urchins, with naked legs, amusing themselves by playing in a bog, totally regardless of being wet or cold. The distance from Ous to Sindby is only one Danish mile; we ran it in forty Near Sindby is a mountain containing iron ore, Sindby. minutes. and also a foundry. The road was crowded with peasants, going to the fair at Kongswinger. There was a fortress situate upon an eminence above Kongswinger, which commanded the village, the road, and the river. We were much Appearance entertained at this place by the sight of the fair. A public Fair at Kongswinger. fair, by collecting the inhabitants of the neighbourhood, and exhibiting them in the height of their gaiety and costume, cannot fail of being interesting to the curious traveller: it also serves to display the produce and commodities of the country. We bought here ptarmigans and moor-game, besides white bread and gingerbread. The dress of the men was singular, from its uniformity: they wore coats of white cloth.

CHAP. III. cloth, faced with red, and red cuffs; and red caps upon their heads. Many of the men were already more than "half seas over," though it was an early hour of the morning. There were many horses for sale, rode by rough-riders. the rest, the appearance was pretty much that of an English fair; -soldiers enlisting for recruits, and alluring the boors by a display of their martial accoutrements; drunken loobies; pretty village lasses; clamorous hawkers; and vagrant Italians, with cheap looking-glasses, and coloured prints.

Money of the Country.

Payments are made in dollars, schillings, and stivers; but in Sweden and Norway the value of schillings and stivers is very different. In Norway, a schilling is the lowest coin, and answers to our halfpenny; and stivers are a penny each. Sweden, schillings answer to our pence, and stivers to our farthings. All small sums are reckoned in stivers; and instead of saying, for example, 'four schillings,' they would say 'sixteen stivers.' A dollar, silver mint, equals eight-pence; and there are six in a rix-dollar note. The general price of barley and rye, in this country, is from four and a half to five dollars the ton. Barley was now selling so high as nine dollars, and rye at ten dollars, per ton; owing to the dearth which had happened, and the effects of which were still felt. The price of labour was twelve schillings a day, without victuals.

After we left Kongswinger, the aspect of the country was more like the grand and striking scenes of the north of Norway; presenting a landscape perfectly picturesque, when viewed as a whole; yet consisting of an amazing variety of parts, all of which, when examined in detail, were magnificent. There never was but one painter of sufficient

capability,

capability, as the historian of Nature, for the representation of CHAP. III. things so varied and vast in their combination;—and this painter was Claude. But for the country here we would rather have called in the aid of Gaspar Poussin than of Claude Lorrain. It had more of the majesty and sudden transitions which mark the favourite subjects of Gaspar's pencil, than of the long-drawn valleys, the never-ending richness and sweetness, of Claude.

At Edsbroen, a single house, almost as wretched as the shed Edsbroen.

at Malmagen where we passed the night upon coming from Sweden into Norway: we were however induced to halt for dinner, upon finding in the Post-book, in the hand-writing of our friend Professor Malthus, the words "good treatment." He had passed this way with Mr. Otter. The good woman of the house was moreover tidy in her appearance, and brought forth some excellent butter. To this we added our bread and cheese, and so made a hearty meal. From hence we had good roads to Magnor, a strange-looking place, con- Magnor. sisting of a parcel of wooden-houses, huddled together under a mountain. We found nobody at home: all the inhabitants were gone to Kongswinger fair. We therefore proceeded farther; and came to an inhabited dwelling, where we found an old woman in bed, who from the age of nine to sixtynine, had been always bed-ridden. Our host was her nephew, and had himself seven children; but for many years, with a degree of tenderness amounting to a filial affection, he had attended upon and solaced the infirmities of this poor afflicted invalid. In the next stage, between Magnor and Boundary be-Morast, we passed from Norway into Sweden, at the distance way and

CHAP. III.

Singular instance of honesty in a Peasant. of half a Danish mile from Magnor. An avenue cut through the forest marks the boundary between the two countries. Just before passing this boundary, hearing somebody calling behind us, we halted. It was the identical peasant at whose dwelling we had stopped, and whose charitable conduct we have noticed. He had galloped after us with a pocket-book, containing a considerable sum of money, which we had left upon his table; having taken it out to bestow something upon his poor family. A very little more speed on our part, or less of diligence on his, and we should have been out of his reach: and if this had been the case, few readers would regret that such singular honesty, in the midst of such poverty and goodness, had met with a larger reward than we could then afford to bestow. It was not the first symptom which we have had to notice of our approximation to that land of honesty, Swepen: and whether the individual we have alluded to were a Norwegian or a Swede, we are well assured, that, beyond the limits of these two countries, similar instances of regard for the distinctions between 'mine' and 'thine' will not be always so scrupulously regarded. At the place where the avenue has been cut, a stone is erected, which exhibits on one side of it the arms of Denmark; and on the other, those of Sweden: and about a quarter of a Swedish mile farther on, before reaching the end of this stage, there is the Gate and Custom-house on entering the Swedish territory.

Morast.

Finding no accommodation at *Morast*, the next relay, we proceeded, chiefly amidst woods of red fir, with a few openings of cultivation, through *Haga*, to *Strand*; where we

Haga. Strand.

arrived

arrived at midnight; being guided in the woods by peasants CHAP. III. on foot carrying flambeaus made of deal splinters. inn at Strand was bad indeed; but the truth is, that between Magnor and Carlstad there is no place of rest for travellers which can be called by the name of an inn: they are wretched hovels, tenanted by the poorest peasants. At Strand, a whole crop of cabbages was hanging from the roof, to dry.

Upon the first of November, we left Strand; and set out for

Torches.

Prestbol. The dress of the natives exhibited a curious Extraordinary change as we entered the province of Wermeland. peasants were all in black, as if for a general mourning; and this costume, added to their poverty and the sterile aspect of their country, had a melancholy appearance. . We hardly entered a house without seeing some lamentable object, either sick or deformed. The soil itself is of a nature to bid defiance to cultivation: it consists of loose masses of stone, which can neither be removed, nor rendered in any way productive. It seemed to be the very region of poverty and despair, denuded and smitten by the hand of Heaven. In perusing the manuscript journal of a friend who had travelled the same route only three months before, we found similar observations made as to the melancholy aspect of all Aspect of the this district, and to the impressions made upon his mind upon seeing all the inhabitants dressed in black clothes. When we entered Sweden from Denmark, we were struck with the superior liveliness of the Swedes; but in entering it now from Norway, we received a very different impression.

The the Natives of Wermeland.

To add to the general wretchedness of the country, a greater Consequences of a recent Dearth.

dearth

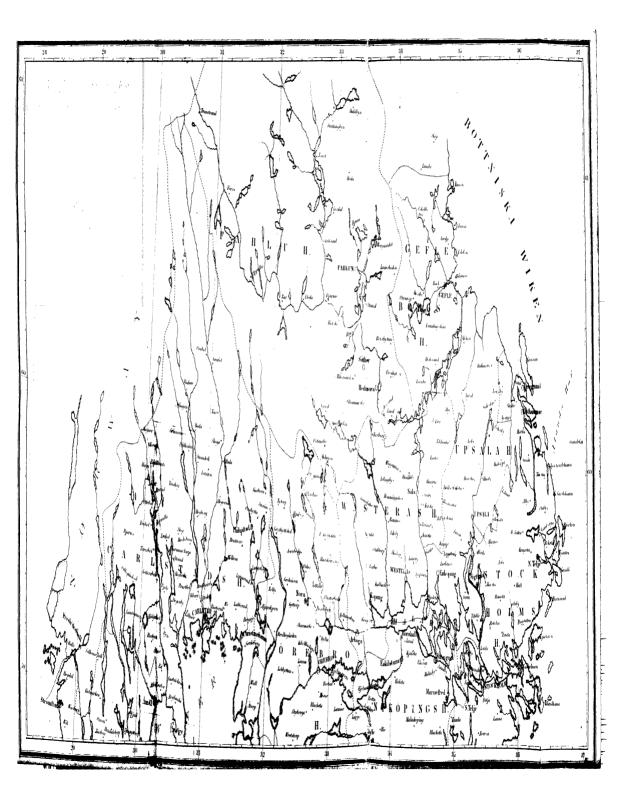
CHAP. III. dearth had prevailed, during the former winter, than the oldest person ever remembered. Oats were six dollars a ton. which commonly sell for two or three. Barley and rye were scarcely to be had at any price. The people had saved themselves from starving, by eating the bark bread, and a bread which they said they made of a kind of grass: this grass we afterwards found to be sorrel. The fir-bread had given to many of the inhabitants an unhealthy appearance: they found the sorrel-bread, upon the whole, more salutary. The general effect of eating fir-bread is, to produce a yellow, pale, and unhealthy countenance. In every thing, the appearance of the people was strangely contrasted with that of the Norwegians.. The latter wear red caps. The Swedes, in their broad-brimmed hats, without any buttons upon their black coats, looked like so many Quakers in mourning.

Hogyalla. Leerhol.

Skamnia.

pearance of the land.

Presently after leaving Strand, we had a fine view of a lake which discharges its waters into the Wener. We passed Hogvalla, Leerhol, and Skamnäs. In the forests were junipertrees, rowing to a very great size. We were ferried over to Skamnäs; the passage being nearly half a mile wide. view of the lake from the post-house here was very fine. The Improved ap- country was more open and cultivated in going to Hogboda and Prestbol; interspersed with small lakes, the shores of which were ornamented with fir, birch, and alder. sorts of alder are very common in Sweden, as well as in Norway;



Norway; growing often in very dry ground. It was dark CHAP. HI. before we arrived at Prestbol. We found here another miserable inn. *

is

The next morning, November the second, we descended into plains which reminded us of Norfolk and Suffolk. appearance of the country was greatly improved. We changed horses at Ilberg; and reached CARLSTAD, the capital Carlstad. of Wermeland, upon the Wener Sea, by eleven o'clock in the forenoon. The view in the approach to this city is very pleasing. We entered it by a bridge'. The houses are covered with turf, as in all the towns leading from Wenersborg to Stockholm, on the southern side of the lake. The inn here was very dirty; yet Carlstad is a much finer town than Wenersborg: the streets are broad and long, and contain many good houses, and a general appearance of activity and business seems to denote a thriving place. The Episcopal Palace

⁽¹⁾ See the Map, p. 126 of the last Volume. Lond. 1819. "Equitum lustrationibus nundinisque festo D. Pauli et Luciæ celebris, quæ etiamnum a Gothenburgensibus aliisque vicinis magno cum emolumento frequentantur." Descriptio Sueciae, tom. I. p. 442. Lugd. Bat. 1706.

⁽²⁾ It is, in fact, built upon an island. (See the Map) " The iver Clara," says Thomson, in his account of this place, "runs through this province, and falls into the lake Vener. It is a large river, but, like the Dal, runs so slowly, that it has more the appearance of a lake than a river. Some miles before it falls into the Vener, it divides into two branches, enclosing the Island of Tingwalla. At the northern extremity of this island stands the town of Carlstad; so called because it was built by Charles IX. This town is a Bishop's See. Like the other Swedish towns, it is built of wood. The streets are broad and straight, and the number of inhabitants about 1500. It carries on a commerce of wood and iron across the lake Vener." Thomson's Trav. in Sweden, ch. xx. p. 373. Lond. 1813.

CHAP. III. is built of wood, as are all the other houses. The Governor of the province also resides here. Both Carlstad and Philipstad were built by Charles the Ninth; the first being called after his own name, and the last after the name of his son Philip.

Exports and Imports.

The principal productions of the mines and forests of Wermeland are here shipped for Gothenburg; and the exportation of bar-iron and timber may be considered as the staple commerce of Carlstad. The importations consist of provisions and other necessaries. Dirty inns are often the dearest: and this we found to be the case here. Every thing was charged at most exorbitant prices: but this is not a cheap place for any thing beyond common necessaries. Loaf-sugar sold in the shops as high as a rix-dollar the pound, being all of it imported from England. The accounts given to us of the population of Carlstad were so discordant, that we could place no reliance upon them; some estimating it at 3000, and others at 1400: we were disposed to credit the last, rather than the first; and this number nearly coincides with the statemen, already cited in a note. There is a square here, as

Population.

We left Carlstad, on Sunday, November the third, passing the north-eastern branch of the Clara, by some called the Carls Elf.

at Wenersborg, surrounded by wooden houses, with a very

River Clara.

neat appearance.

⁽¹⁾ See p. 186 of the last Volume, Quarto Edition, for an account of a manufactory for refining sugar at Grfle, belonging to Mr. Hennis; being the first of the kind established in Sweden.

Elf's, by a large stone bridge with iron rails, erected in a light CHAP. III. and elegant style of architecture. It was a very foggy morning, which prevented our having some fine views of the Lake Wener. The Governor had sent for us, demanding a sight of our passport: we therefore called at his house, as we were leaving this wooden city. The road leading to Brästegard lies, for the most part, by the side of lakes, which discharge their waters into the Wener, by means of a small river. From Brästegård we came to Molkem; near Brästegard which place there is a large lake, the village being prettily situate at the end of it. The church service had just ended; and a vast throng of the peasants filled the post-house, impatient to get their drams, according to custom, as a morning-whet after prayers. We saw no symptoms of intoxication: but this is the Swedish custom. Many of them came from a great distance; and a little brandy, as one of them jocularly told us, helped to digest the sermon, and to sharpen their appetites for dinner. The road was crowded with little carts, each drawn by one horse, conveying the different families to their several homes; and with the youth of both sexes, who were pacing on foot, by the side of their parents. Here a change was again visible in the costume. In the north the dress of the of Wermeland, as we have described it, the dress of the peasants was uniformly black. It was also very uniform

here:

^{(2) &}quot;Urbs hic unica Carolostadium, à Rege Carolo IX. depominata, occupat insulam, ab ingenti flumine Carls Elff, ubi lacui Wener miscetur, factam, in quo ipso Wermize meditullio sitam." Amænit. Regn. Suec. tom. I. p. 442. L. Bat. 1706.

CHAP. III. here: but the colours were grey or blue; all blue, or all grey, as the parties were from different districts. From Molkem to Brättefors, the distance is fourteen English, or two Swedish miles; the roads being of that incomparable nature which we have so often described in Sweden; but to which frequent allusion may be made, that the Reader may bear in his mind the actual state of the country, and the industry of its inhabitants. Incessant rain had fallen for some time before, without effecting the smallest change in the excellent condition of these roads. The material for making them is always the same; a fine gravel, covering the broad and flat way. We did not consider the perfect state of the Swedish highways as owing so much to the material used, as to the manner adopted in making them. There is nothing of promiscuous work carried on, by way of keeping them in order; nor any thing like a proposal set on foot for mending. them by contract; enabling adventurers to enrich themselves, by jobbing, at the public expense. Each peasant has a portion of the road assigned, by measure, to his peculiar care: and these portions are marked out by little boards, bearing the names of the peasants to whose management they have been entrusted: by which means emulation is excited among them; every peasant being stimulated, by a degree of pride, to surpass, if possible, in his allotment, the work of his neighbour. We have known them, when they have attended us with their horses, point with exultation to the condition of that part of the road which has been under their care. At Molkem we dined in a neat new-built house, upon the game we had brought with us, and, as usual, upon our bread and cheese.

Manner of keeping the Roads in repair.

· Near Brättefors, our fore-axle broke: we therefore left the CHAP. III. servants behind, to take care of the phaeton, and to have it mended; and went forward, in a peasant's cart, to the inn: where we hired two more carts to convey us to Philip-STAD. Brättefors is black with iron forges; and the houses. Brauefors. some of which are good, are painted red. The road to Philipstad from Brättefors' passes many iron-foundries, and leads the traveller through finer scenery than the south of Sweden usually exhibits. The soil, if it may bear the name of soil, is altogether incorrigible: it consists of enormous loose fragments of bare granite, piled together till they become mountains, and form steep precipices. Upon these boulders there appears hardly a trace of any vegetable earth, Boulders or even of any kind of covering; yet they are thickly planted with forests of tall pines, birch, and juniper trees, which, in Trees. a maryellous manner, have found nourishment for their roots in the interstices between the boulders. Wolves are very Animals. numerous here: bears not so frequent. But of all quadrupeds, the most abundant is the beautiful grey squirrel, which is seen skipping in the trees, and continually crossing the road. Sometimes, regardless of the traveller, these playful

⁽¹⁾ For the curious minerals produced in the whole of this mining district, but which did not occur in this route, the reader is particularly referred to Engeström's Guide du Voyageur aux Carrieres et Mines de Svéde; Stockholm, 1796. Also to Thomson's Travels in Sweden, c. 20 p. 374. Lend. 1813. According to Engestrom, Journée III. p. 48. there was found a Brüttefors mine, about the middle of the eighteenth century, a small vein of ferruginous clay, crossing the vein of iron, very rich in native silver, partly massive globular and ramified, and partly mixed in fine grains in the clay; which, moreover, contained a good deal of kupfer-nickel, and a little ore of cobalt.

CHAP. III. playful little animals, being perched upon a bough near the road, will tumble into all sorts of attitudes, as if purposely to invite his notice, and to entertain him with their gambols.

Philipstad.

It was nearly dark before we arrived at Philipstad. We could perceive some country-seats most delightfully situate upon the shores of the little lake, at the northern extremity of which the town is placed. Although not so large as Carlstad, it seemed neater in its appearance. The view of it across a part of the lake, in the approach to the town, affords a most pleasing prospect; and except in such circumstances of situation, there is little variety in the aspect of any of the Swedish towns. Having once figured to the imagination a number of low red houses, of a single story, each covered with turf and weeds, a picture is presented to the mind which will serve to give a correct idea of all the oppidan scenery of Sweden. There is no other country in the world, excepting perhaps Russia, that exhibits, over an equal e-tent of territory, such unvaried uniformity; and this. not only in the appearance of its buildings, but also of its inhabitants and landscapes. The dress of the women, from one extremity of the kingdom to the other, is nearly the same;a 'scull-cap, sitting close to the crown, edged with a little stiff lace, the hair being drawn as tight and straight as possible beneath the cap, from all parts of the head, as if to start from the roots: add to this, a handkerchief, thrown over the cap only when they go out; a jacket; short petticoats; stockings of coloured or white woollen; and highheeled shoes;—this is the general costume of the Swedish

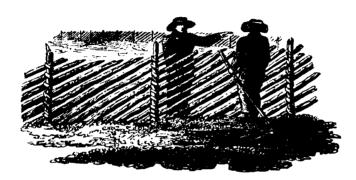
women. Then, for the landscape—one unbroken boundless

Uniform appearance of the Swedish towns.

Dress of the Natives.

forest; varied only in the uniformity of its aspect by little CHAP, III. patches of cultivated land, enclosed by fences formed everywhere in the same manner, by sloping splinters of deal fastened by withys against upright poles. In fact, there is no other kind of fence used for enclosures over all Sweden, Lapland, Finland, and Norway.





Philipstad is supported entirely by the mines in its neighbourhood: its commerce is consequently the same as that of Carlstad. It has been often destroyed by fire. Church is a handsome white building, and looks well in the approach to the town. The environs are well wooded with fir, birch, and alder. There are here some good houses, but they are all painted of a red colour. The streets are paved. Most of the houses are covered with masses of iron slag, láid on to keep down the birch-bark upon the roofs.

The next day, Monday, Nov. 4, our servants arrived at twelve o'clock with the carriage, which had been well repaired, and, as they said, rendered fit for any journey: but they had lost our bundle of fine juniper-sticks, which we Juniper Trees. had cut in the woods as we passed, and prized very much, as curious memorials of our journey, on account of their straight tapering shape, and the beauty of the bark which

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CHAP. III. covered them. Although this loss, it might seem, would be easily repaired amidst the Scandinavian forests, we never afterwards saw the juniper flourishing in such perfection as upon the frontiers dividing the south of Sweden from Norway; where it rises, in a sandy soil, to the height of twelve, sixteen, and even eighteen feet. Its branches are more erect than those of the common juniper, the leaves narrower and in more acute points, and are placed farther asunder on the branches: the berries also are larger. This Swedish or Tree-juniper was considered by Miller as a distinct species from the Juniperus communis; but they are only varieties of the same species.

Onshutta

We left Philipstad about four o'clock P.M.; and proceeded one stage, to Onshytta. Near this place are the celebrated iron-mines of Persberg, which it was our object For this purpose we waited on an officer of the to visit. mines, called the Brûks Patron, or Intendant; and also upon the Director of the works; begging also to see any collection of the P sherg minerals which might be in the place. were not surprised at being told that no one interested himself in making collections; but that we might collect them ourselves, if we thought proper, at the mines. obtained also permission to descend into the principal mine, and to inspect the works, we fixed upon nine o'clock of the following day for making this visit; when the Intendant volunteered his services, and offered to accompany us. then returned to the inn, where we found a very comfortable room; and spent the rest of the evening in writing our journals from the notes we had made, and in making preparation

⁽¹⁾ Martyn's Edit. of Miller's Dict. Vol. I. Part 2. Lond. 1807.

preparation for our subterraneous expedition. Here we saw CHAP, III. that remarkable bird, which, in Norway, is called, by those who speak the English language, the Wild Turkey: being, however, not much like a turkey; but properly ranking at the head of the whole genus Tetrao, which is seen in such perfection among all the forests of Sweden and Norway. It is the largest of the two kinds of Tetrao, commonly known Two species of Tetrao or by the name of Black-cock, and is called Tjader by the Black-cock. Swedes. The male is called simply Tjader; but the female, Tjader hena, or the Tjader Hen. This magnificent bird, of which we saw the cock in full feather, is the Tetrao Urogallus of Brünnichius. The Norwegians call it Tiur, Teer, and Tedder. We saw also with it the other kind of Black-cock found in Norway, which enabled us to compare the two together. This last is the common Black-cock. The male is called by the Norwegians, Orre, and Orr-fugl; and the female Orre héna. It is the Tetrao Tetrix of ornithologists'. Both one and the other are found in tolerable abundance in the woods. Of this beautiful genus Tetrao, so valuable as an article of food, and so much esteemed by epicures, no less than eight species are common upon the Scandinavian mountains.

On Tuesday, Nov. 5, we visited Persberg, distant a quarter Persberg. of a Swedish mile from Onshyita. There are here not less than thirteen different mines, all worked for iron, which have no commu-

⁽²⁾ Ornithologia Borealis, Brünnichii, p. 59. Hafniæ, 1764.

⁽³⁾ Ibid. The author has seen the Tetrao Tetrix served at a London dinner-table: it had been sent as a present from Norway.

CHAP. III. communication with each other. To inspect the whole of them would require at least three days of active exertion. The hill, or mountain, in which these mines are situate, is itself entirely composed of veins and beds of iron-ore. A careful examination of one of them may, therefore, serve to afford a tolerably accurate knowledge of the whole. The Intendant who had so politely offered his services upon this occasion, as politely withdrew from the appointment; not being desirous to follow us into the depths of the mine which he saw we were resolved to explore. However, he left us some stout miners to be of the party; men much better suited for the undertaking, and likely to be much more For some time after our arrival, we were serviceable. employed in collecting minerals from the vast heaps of excavated matter, and from the labourers in the works. of these will be found in a Note; being calculated only to interest the chemical or mineralogical reader. Afterwards, we set int to examine the oldest and the largest of these They are all of them private property, divided into mines. a great

(1) Octahedral crystals of iron-oxide in chlorite.

Foliated sulphuret of bismuth.

Sulphuret of iron, crystallized in the octahedral and cubic form.

Asbestus and amianthus, imbedded in green serpentine.

Steatite and pot-stone.

Crystallized carbonate of lime.

Globular fibrous carbonate of lime.

Dark-green foliated mica.

Leelite-sometimes called flesh-coloured horn-stone.

Hornblende.

Crystallized quartz.

Epidote.

a great many shares. The miners work by measure; CHAP. III. earning daily a sum equal to about two shillings English; that is to say, half a rix-dollar. They are paid weekly.

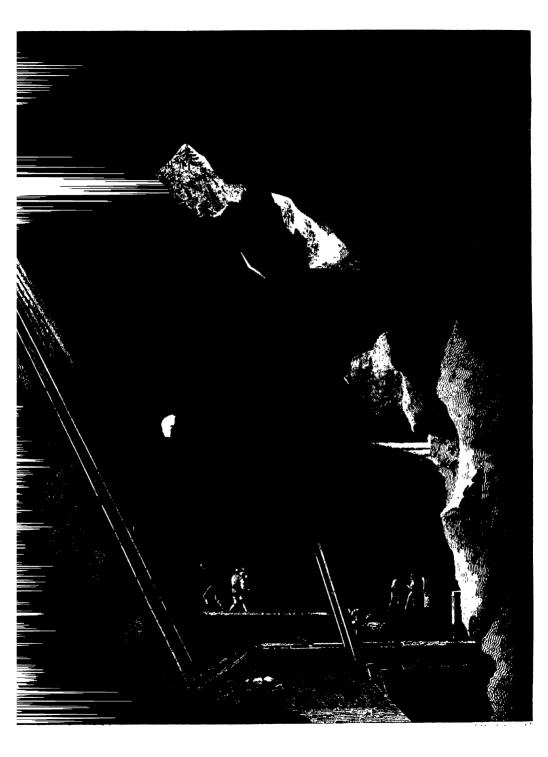
The author's visit to these mines was made after he had personally inspected many of the principal works of the same nature in other countries, and especially in his own. For the last ten years of his life, he had been much in the habit of seeing similar works: it is not therefore owing to any surprise at the novelty of the scene before him, that he has now to mention the astonishment he felt when he arrived at the mouth of one of the great Persberg mines; but he is fully prepared to say of it, and with truth, there is nothing like it in all that he has beheld elsewhere. For grandeur of effect, filling the mind of the spectator with a degree of wonder which amounts to awe, there is no place where human labour is exhibited under circumstances more tremendously striking. As we drew near to the wide and open abyss, a vast and sudden prospect of yawning caverns and of prodigious machinery prepared us for the descent. We approached the edge of the dreadful gulph whence the ore is raised; and ventured to look down; standing upon the verge of a sort of platform, constructed over it in such a manner as to command a view into the great opening as far as the eye could penetrate amidst its gloomy depths: for, to the sight, it is bottomless'. Immense buckets, suspended by rattling chains.

⁽²⁾ See the Vignette to this Chapter.

CHAP. III. chains, were passing up and down: and we could perceive ladders scaling all the inward precipices; upon which the work-people, reduced by their distance to pigmies in size, were ascending and descending. Far below the utmost of these figures, a deep and gaping gulph, the mouth of the lowermost pits, was, by its darkness, rendered impervious to the view. From the spot where we stood, down to the place where the buckets are filled, the distance might be about seventy-five fathoms; and as soon as any of these buckets emerged from the gloomy cavity we have mentioned, or until they entered into it in their descent, they were visible; but below this point they were hid in darkness. clanking of the chains, the groaning of the pumps, the hallooing of the miners, the creaking of the blocks and wheels, the trampling of horses, the beating of the hammers, and the loud and frequent subterraneous thunder from the blasting of the rocks by gunpowder, in the midst of all this scene of acavation and uproar, produced an effect which no stranger can behold unmoved. We descended with two of the miners, and our interpreter, into this abyss. The ladders, instead of being placed like those in our Cornish mines, upon a series of platforms as so many landing-places, are lashed together in one unbroken line, extending many fathoms; and being warped to suit the inclination or curvature of the sides of the precipices, they are not always perpendicular, but hang over in such a manner, that even if a person held fast by his hands, and if his feet should happen to slip, they would fly off from the rock, and leave him suspended over the gulph. Yet such ladders are the only means of access to the works below: and as the

labourers

Descent into the Iron Mmes.



labourers are not accustomed to receive strangers, they CHAP. III. neither use the precautions, nor offer the assistance, usually afforded in more frequented mines. In the principal tinmines of Cornwall, the staves of the ladders are alternate bars of wood and iron: here they were of wood only, and in some parts rotten and broken, making us often wish, during our descent, that we had never undertaken an exploit so hazardous. In addition to the danger to be apprehended from the damaged state of the ladders, the staves were covered with ice or mud; and thus rendered so cold and slippery, that we could have no dependence upon our benumbed fingers, if our feet failed us. Then, to complete our apprehensions, as we mentioned this to the miners, they said,—"Have a care! It was just so, talking about the staves, Catastrophe that one of our women' fell, about four years ago, as she Female was descending to her work." "Fell!" said our Swedish interpreter, rather simply; "and pray what became of her?" "Became of her!" continued the foremost of our guides, disengaging one of his hands from the ladder, and slapping it forcibly against his thigh, as if to illustrate the manner of the catastrophe,—" she became (pankaka) a pancake."

As we descended farther from the surface, large masses of ice appeared, covering the sides of the precipices. Ice is raised in the buckets with the ore and rubble of the mine: it has also accumulated in such quantity in some of the lower

(1) Females, as well as males, work in the Swedish mines.

CHAP. III. lower chambers, that there are places where it is fifteen fathoms thick, and no change of temperature above prevents This seems to militate against a notion now its increase. becoming prevalent, that the temperature of the air in mines increases directly as the depth from the surface, owing to the increasing temperature of the earth under the same circumstances and in the same ratio; but it is explained by the width of this aperture at the mouth of the mine, which admits a free passage of atmospheric air. In our Cornish mines, ice would not be preserved in a solid state at any considerable depth from the surface.

After much fatigue, and no small share of apprehension,

Bottom of the Persberg Mine.

we at length reached the bottom of the mine. we had no sooner arrived, than our conductors, taking each of us by an arm, hurried us along, through regions of " thick-ribbed ice" and darkness, into a vaulted level, through which we were to pass into the principal chamber of the mine. " ac noise of countless hammers, all in vehement action, increased as we crept along this level; until at length, subduing every other sound, we could no longer hear each other speak, notwithstanding our utmost efforts. At this moment we were ushered into a prodigious cavern, whence the sounds proceeded; and here, amidst falling waters, tumbling rocks, steam, ice, and gunpowder, about fifty miners were in the very height of their employment. The magnitude of the cavern, over all parts of which their labours were going on, was alone sufficient to prove that the iron-ore is not deposited in veins, but in beds. below, on every side, and in every nook of this fearful

dungeon,

Striking scene in the Great Cavern.

dungeon, glimmering tapers disclosed the grim and anxious CHAP III countenances of the miners. They were now driving bolts of iron into the rocks, to bore cavities for the gunpowder, for blasting. Scarcely had we recovered from the stupefaction occasioned by our first introduction into this Pandæmonium, when we beheld, close to us, hags more horrible than perhaps it is possible for any other female figures to exhibit, holding their dim quivering tapers to our faces, and bellowing in our ears. One of the same sisterhood, snatching a lighted splinter of deal, darted to the spot where we stood, with eyes inflamed and distilling rheum, her hair clotted with mud, dugs naked and pendulous; and such a face, and such hideous yells, as it is impossible to describe:-

> Black it stood, as Night-fierce as ten Furies-Terrible as Hell-

It we could have heard what she said, we should not have comprehended a syllable: but as several other Parca, equally Gorgonian in their aspect, passed swiftly by us, hastening tumultuously towards the entrance, we began to perceive, that if we remained longer in our present situation, Atropos might indeed cut short the threads of our existence; for the noise of the hammers had now ceased, and a tremendous blast was near the point of its explosion. We had scarcely retraced with all speed our steps along the level, and were beginning to ascend the ladders, when the full volume of the thunder reached us, as if roaring with greater vehemence because pent amongst the crashing rocks, whence, being reverberated over all the mine, it seemed to shake the earth itself with its terrible vibrations.

CHAP. III.

Imbedded state of the Ore.

We were afterwards conducted into other cavities of the Persberg works. The whole hill of Persberg may be considered as a vast deposit of iron-ore; the orelying in separate beds. The miners work in spacious caverns, like those of our salt-mines, at Sandbach, in Cheshire; excepting that the interior of our salt-mines, containing neither glaciers nor cataracts, nor dreadful precipices to be scaled by means of rotten ladders', nor filthy wretched females doomed to do the work of men, are rather pleasing than intimidating in their appearance. The ore of the Persberg mines consists of magnetic iron-oxide, either in fine or in coarse grains. Those mines which we saw, and in which, working with our own hands, we obtained specimens of the ore, exhibited this oxide in a state of very remarkable association with garnet; insomuch that garnet may be considered here, not only as a leader to the ore, but as the ore itself; many of the specimens wrought for the iron they contain being masses of garnet. The whole district is of primitive formation; the rocks being of gneiss or of granite, containing more or less of hornblende, and, in some places, beds of primitive limestone².

As

⁽¹⁾ The descent into the *Cheshire* salt-mines is by means of buckets, in which ladies may be conveyed into the mine, and back again, with the utmost safety and cleanliness.

⁽²⁾ Montana est " (observes the author of the Amaintates Regnorum Succiae, with reference to this province,) "et sylvestris. Metalli fodinas, et nuper admodum ditissimam cupri venam inventam habet." (Deliciae, sive Amain. Regn. Succ. tom. I. p. 442. L. Bat. 1706.)

As soon as we had concluded our examination of the Persberg CHAP, III mines, we went to the Inspector's house, where we packed up our minerals. Afterwards, returning to the inn at Onshytta, we set off for Saxan. The whole of this part of Wermeland is throughout perforated by mines.

About nine English miles from Onshytta, at a place called Langbun-Langbanshytta, there is an exceeding rich mine of iron ore, of which the principal part is the per-oxide called hamatite: it lies to the north of the road leading towards Saxán; but we could not bestow time enough for visiting this mine. The mineralogical traveller will however be wise, if he do not follow our example in this respect. He will find few mines richer in interesting minerals. He should also be aware, that at the distance

- 1. Sub-varieties of hæmatite.
- 2. Magnetic iron-oxide, granular, fibrous, and crystallized. Also micaceous iron and specular iron ore, similar to that from Elba, yet attracted by the magnet.
- 3. Sulphurat of iron.
- 4. White manganes spar, globular and radiated.
- 5. Iron 5 ar.
- 6. Ferruginous scintillating sulphate of lime.
- 7. Sparry carbonate of lime.
- 8. Red and brown jasper, according to Engestrom. According to Thomson, this is iron flint

[&]quot; The whole of Vermeland, ' says Thomson, " with the exception of a small track on the borders of the Vener, is primitive, and may be said to consist entirely of gneiss rocks, similar to those which constitute the neighbourhood of Gottelung. Here and there occur beds of mica-slate, limestone, primitive grunstone, &c.; but none of them, as far as I could learn, are of any great extent. It is to the mines which abound in this province that it owes its chief value." Thomson's Trav in Sweden, p. 374. Lond. 1813.

⁽³⁾ It has been wrought upwards of three hundred years. It is near a lake called Långban. According to Dr. Thomson, (Trav. in Sweden, p. 378,) it lies in a limestone rock. The minerals found in this mine are:

there are the *iron*-mines of *Normark*, in which the minerals are neither so curious nor so varied and abundant as at Långbanshytta; but the mines themselves are very antient, and well worthy of his attention. A little more than an English mile from Normark are also the *iron*-mines of Taberg;

and

- 9. Garnets, red and yellow; containing from 15 to 21 per cent. of iron. (Thomson.)— Dr. Thomson mentions a garnet found here, containing, besides 26 per cent. of oxide of iron, above 8 per cent. of oxide of manganese, lime, carbonic acid, and soda: the silica amounting to 35.20.
- 10. Pyenite.
- 11. Tourmaline.
- 12. Green and yellow serpentine.
- 13. Mountain-leather, mountain-cork, and other varieties of asbestus and amianthus.
- 14. White clay.
- 15. Black massive hornblende.
- 16. Epidote.
- · 17. Sahlite.
 - 18. Petroleum, and glance-coal.
 - 19. Red silicate of manganese.
- (1) It lies in mica-slate. Limestone, containing manganese and hornblende, occurs in this mine. (Thomson.)—Its other minerals are:
 - 1. Magnetic iron-oxide.
 - 2. Sulphuret of lead, crystallized.
 - 3. Varieties of crystallized carbonate of lime.
 - 4. Varieties of asbestus. Mountain-leather, mountain-cork.
 - 5. Dark foliated mica.
 - 6. Dark-green fibrous hornblende.
 - 7. Crystallized sahlite.
 - 8. Red garnet.

Dr. Thomson, (Trav. in Sweden, p. 375,) mentions a peculiar mineral found in this mine, which has not yet been named. It was examined, he says, by Gahn, who found it to contain muriatic acid. It occurs crystallized in regular six-sided prisms: its colour is yellowish brown, passing into gradish: by transmitted light, it appears greenish yellow. Its specific gravity equals 3.081.

and they are rendered remarkable for the singular varieties of CHAP III. asbestus, particularly the beautiful amianthus found there". In returning to *Philipstad*, after visiting these mines, he will also find the iron-mine of Agegrufvan, which lies close to the road'. Leaving Onshytta, we were struck by the appearance

of`

- (2) This iron mine lies also in mica-slate. The ore is magnetic iron-oxide. principal minerals, according to Engeström and Thomson, are:
 - 1. Black granular magnetic iron.
 - 2. Sulphuret of zinc.
 - 3. Cubic sulphuret of iron.
 - 4. I me-spar.
 - 5. Micaceous steatite, and serpentine.
 - Dark-green foliated mica.
 - 7. Varieties of amianthus and asbestus.
 - 8. Native bismuth.
 - 9. Sulphuret of copper.
 - 10. Magnesian carbonate of hme. (Bitter-spar.) Also light-blue litter-spar mixed with asbestus.
 - 11. Dark-green chlorite.
 - 12. Light-green asbestiform actinote.
 - 13. Light-green glassy tremolite.
 - 14. Silicate of magnesia, called greenish-grey steatite, consisting of

Magnesia - - -Volatile matter - - 16

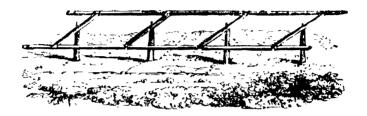
100' Geijer.

- (3) The mines of Age, called Agegrativar, are situate about seven miles from Philipstad. (Thomson's Trav. in Sweden, p. 377.) Like the preceding, they consist of iron ore, which occurs in a rock of anca-slate. The minerals found here, are:
 - 1. Massive and tanular magnetic iron-oxide. 6. Epidote, crystallized in quartz.
 - 2. Many varieties of lime-spar.
 - 3. Garnet, in regular dodecahedral crystals. 8. Various forms of asbestus.
 - 4. Dark foliated mica.
 - 5. Black foliated hornblende.

- 7. Massive epidote.
- 9. Hydrates of silica, of various colours.
- 10. Crystallized quartz.

the Mine Pumps

CHAP. III. of a most curious mechanical contrivance, which presented Machinery for itself in our road, for working the mine pumps. It consisted of a most extensive combination of levers, all in motion, working parallel to each other by means of water, being separated by transverse bars resting upon upright posts with pivots.



These bars were about eight or ten feet in length; but the side levers extended to mines out of our sight. The stream and wheel for giving motion to these levers was on the left-hand side of the road; under which, in one place, the levers passed, and, appearing again on our right, extended over the surface of the ground as far as we could see. Their appearance all in motion, without any person being visible near them, was very extraordinary; for it is difficult to conceive how so much machinery, consisting of such numerous parts, can be preserved in free action and without injury, remote from all observation. We afterwards passed several of these water-works, affording astonishing proofs of the extensive mining operations here carried on. They all move alike, by a successive series of impulses.

Our

For an account of other mines and minerals in the Province of Wermeland, the Reader is referred to Engeström's Guide aux Mines de Swède; Stockholm, 1796: but for much better, and more scientific information, to Thomson's Travels in Sweden, Lond. 1813.

Our journey from Onshytta to Saxan was over a wild and CHAP. III. mountainous district; but the roads were excellent. Saxin. Quantitics of slag and scoriæ, in our approach to Saxån, denoted the presence of iron-foundries, to which it owes its support. Part of the iron ore from Persherg is brought here to be smelted and forged: it is then conveyed, in the form of bar-iron, to Christinehamn, and thence, by the Lake Wener, to Trolhætta and Gothenburg. This trade supports the village of Saxan, which consists of a rich and good inn, and a few respectable farm-houses.

On Wednesday, Nov. 6, we left Sarån about seven A.M. The morning was very wet and cold. We had proceeded about half a Swedish mile in our day's journey to Laxbro, when we passed the boundary of the province of Wermeland, and entered into Westmanland, or, as it is sometimes called, Westmania; the natives of which province speak the Swedish Westmania. language in greater purity, and with a better accent, than any other. Our road lay through forests. In going to Nytorp, our first relay, the appearance of beautiful lakes, like those in the north of Sweden, engaged our admiration. We often wished to halt, and make drawings of them. timber in these forests runs to a prodigious height, but the trees are slender, and by no means equal in bulk to those we had seen in other previnces. We passed iron-foundries and sawing-mills. From Saxan, the whole way to the frontier of Dalarne, or Dalecerlia, in journeying through Westmanland, the traveller constantly meets with mines or iron-foundries: and it is worthy of remark, that whenever these appearances

CHAP, III. take place, there are also evident marks of the blessings of industry, in the neatness and comfort of the dwellings near them, and sometimes in the signs of wealth and of elegance which may be observed. These subterraneous treasures, and their consequences, in employing so many foundries, and in requiring so much aid of machinery for working the mines, are among the most profitable possessions of Sweden. Their evident importance in the prosperity to which they give rise, throughout districts that would otherwise be deserted, ought to serve as a lesson to the inhabitants of other countries to seek diligently for such sources of industry and opulence where the features of the country are unfavourable to agriculture; since it is the same Providence which renders productive to human labour the most bleak and barren rock, and the most fertile vegetable soil. We had left Wermeland with feelings very different from those with which we entered it from Norway; where the barren aspect of the country seemed calculated to excite the murmur of its For even amidst these rocks we beheld inhabitants. "a land which the Lord had blessed;"—a land, it is true, where sluggards might starve,—as they may anywhere; but where a sturdy and active race of men have already found all that is necessary for the comforts and even for the luxuries of life; -- " A LAND WHEREIN THOU SHALT EAT BREAD WITHOUT SCARCENESS, NOR LACK ANY THING IN IT; A LAND WHOSE STONES ARE IRON, AND OUT OF WHOSE HILLS THOU MAYEST DIG BRASS."

About nine English miles from Saxun is Hulleforss, a place Halleforss. long

long rendered remarkable for its silver-mines, but which are CHAP. III. now nearly exhausted. Three English miles and a half beyond Hälleforss we arrived at Nytorp. Rain fell incessantly, Nytorp. and in torrents; but the roads, as before, were so excellent. that it seemed to make no alteration in them. Nutorp, and going towards Iljulsiö, we observed beautiful lakes on each side of the route. We had forest-scenery in our way from Iljulsio to the mines of Nya Kopparberg; a Nya Kopparb name signifying the New Copper Hill, or Copper Mountain; in opposition to Gamla Kopparberg, or the Old Copper Mountain, the name usually given to the works at Fahlun. The copper-mines of Nya Kopparberg were exceedingly rich when they were first discovered, but at present they are poor. The whole district is of primitive formation, and consists of schistose or foliated granite. Various specimens Minerals of granite may be had from these mines; and several varieties of fluor-spar, which is not a common mineral in Sweden. We found here that interesting variety of fluor-spar, which, from its phosphorescing with a green light, is called Chloro-

- (1) The minerals found at Hälleforss are:
 - 1. Argentiterous sulphuret of lead.
 - 2. Sulphuret of lead, crystallized in cubes.
 - 3. Micaceous sulphuret of lead.
 - 4. Yellow sulphuret of copper, in acirular crystals.
 - 5. Sulphuret of iron, in various forms.
 - 6. Sulphuret of zinc.
 - 7. Lune-spar.
 - 8. Crystallized quartz.
 - 9. Hydrates of silica, of various bues.
 - 10. Siliceous breccia.

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exhibits phosphorescence in such a high degree of perfection, or with such beautiful hues, as when it is found in a state of association with the ores of copper. The ore of Nya Kopparberg is the yellow sulphuret, called copper pyrites: it is found accompanied by the sulphurets of zinc and iron. Among the rarer minerals of this mine may be mentioned the remarkable substance to which D'Andrada gave the name of Petalite; since rendered so interesting to the mineralogist and the chemist by containing Lithina, the new alkali, discovered in this mineral by Arfvedson, the pupil of Berzelius.

The village near which the Nya-Kopparberg mines are situate.

- (1) The minerals of Nya Kopparberg are:
 - 1. Grey sulphuret of copper.
 - 2. Yellow sulphuret of copper-peacock-ore of copper.
 - 3. Sulphuret of zinc.
 - 4. Sulphuret of lead.
 - 5. White, green, and violet fluor-spar.
 - 6. Fibrous hornblende.
 - 7. Actynolite.
 - 8. Pot-stone,
 - 9. Dark-red feldspar.
- 10. Mica.
- 11. Sulphuret of iron.
- 12. Quartz.
- 13. Petalite. (See Thomson's Travels in Sweden, for this locality of petalite.) The mines from which the specimens have been derived that have been usually sold in England, are those of Uto.
- (2) This discovery took place nearly at the same time that the analysis of petalite, by the author of these Travels, was published in Dr. Thomson's Annals of Philosophy. The author had transmitted to the celebrated Berzelius, through Mr. Swedenstierna of Stockholm, his doubts as to the presence of a new body in petalite, calculated to supply the loss sustained in his own examination of that mineral. In Mr. Swedenstierna's answer, the discovery of lithina, by Arfvedson, was announced. Mr. Swedenstierna's Letter is dated February 17th, 1818. It is now in the author's possession.

situate, is called Laxbro. The inn here was quite full, owing CHAP, III. to a Sessions held by the principal Magistrate of the district: but the master of the inn, with great kindness, had provided for us most excellent accommodations in a very splendid house, hard by, belonging to one of the proprietors of the mines. We found here a few books which convinced us that topographical works were beginning to make their appearance in Sweden. Among others, we saw a description of the town of Orebro, with plates tolerably well executed: it had been printed in Stockholm. The business of the Sessions had assembled some of the lawyers. We passed the evening with one of them, a very intelligent man, well read in the antiquities of his country, and well acquainted with the Finnish language. He told us, that this language is more difficult for a Swede to become acquainted with, than with English; which must be evident to an Englishman, from the resemblance his own language bears to the Swedish; and its total discrepancy, when compared with the language of Finland, which seems to bear no resemblance to any other language, if we except that of Lapland, to which, however, it is not nearly allied. A curious circumstance happened in former times, during a war between Sweden and Russia. A colony of Finns, disturbed in their settlements by the predatory incursions of the Russians, deserted their country, crossed the Gulph of Bothnia at the Quarcken, and established themselves in the forests of Herjeadalen, where their descendants, at this hour, speak the Finnish language in its original purity.

1.011

CHAP, HI.

If we were to describe all the beautiful lakes which we Beauty of the saw in our next day's journey, Nov. 7, in going from Laxbro to Bommarsho, the Reader might fancy himself transported, by the Fairy-led Muse of Spenser, amidst the scenes of some terrestrial paradise. So much is due to the picturesque beauty of the landscapes. A traveller, who is a draughtsman, might be tempted to halt almost at every instant, and endeavour to delineate some of these delightful views.

> Soon after leaving the house of the wealthy proprietor who had so politely and hospitably received and entertained us, we passed close to the mouth of one of the principal mines, which, with its yawning gulph and complicate machinery, occurred by the side of the road. There was not a living creature to be seen near it; but we were told that a numerous body of miners were at their work below. No precaution is used in Sweden, either to close up, or to fence, the dangerous pits which have been made in working the mines; neither is there any sign by which their situation may be known. The consequences must be obvious, in the accidents which happen: for the benighted stranger who is travelling in this country, and the herds of cattle foddered in the forests, must be constantly liable to fall into them. We passed some of the lakes before mentioned. Near Hog forss we saw a smelting-house, once used for silver ore found near this place, in Christian's Mine, which is now exhausted. A continued series of lakes was exhibited to us, in the midst of the most beautiful undulating forest scenery, during the journey from Hogforss, through Hellsion, to Ostanbo, which is situate

upon one of those lakes. How numerous are these aqueous CHAP. III. scenes in Sweden! May they not be considered as the reliques of that vast world of retiring waters, out of which rose the rocks and the forests of Scandinavia: and of which the Wener and the Wetter Lakes, nay, even the Gulph of Bothnia, and all the Baltic Sea, are themselves only the vestiges? "These lakes," says Thomson', in his valuable account of Sweden, "consist of the purest and most transparent water; and serve not only to beautify the country, but are a considerable resource to the inhabitants, on account of the numerous fish which they all contain." In very many instances, their banks are so covered with wood, that the trees grow luxuriantly quite down to the water's edge; which remark particularly applies to the Wener, covered all round its shores with the most magnificent groves. Yet that these lakes are but the Diminution remains of an overwhelming deluge, once as hostile to the Waters. prosperity of the human race as they now are beneficial, is evident from this circumstance, that their waters are gradually retiring. Judging therefore of the distant and the future by the present, we may fairly conclude, that, as a general flood once involved the whole of this watery region, out of which—realizing the antient fable of a Venus Anadyomene—has risen the whole of Scandinavia, so it is reasonable to infer that some portion of mankind, yet unborn, will hereafter people the mountains and the hills and

CHAP. III. and the valleys now covered by the waves. "There is great reason to believe," observes the author before cited, "that the lakes in Sweden are diminishing in their size, and that many of them will at last dry up. I saw several striking instances of this diminution. It is attended with a corresponding diminution in the size of the Swedish rivers: most. if not all, of which originate from lakes. This diminution has become so striking at *Upsala*, that apprehensions are entertained that the river running through the city will soon be incapable of driving a corn-mill, upon which the University depends for a considerable part of its revenue. A diminution in the size of the Baltic has ever been remarked by the Swedish writers; and demonstrated by evidence that, to me, at least, appears incontestable."

Smedbacka.

From Ostanbo to Smedbacka, the distance is only half a Swedish mile. Here we found an iron-foundry, and several new buildings pleasantly situate upon a lake. We considered a dirty inn at Smedbacka as by no means a common occurrence in Sweden. In this country, cakes are made by mixing the blood of animals with rye-flour, which are afterwards fried in grease, and esteemed luxurious articles of food. Should any fastidious reader consider such a diet as the remains of barbarous Teutonic customs, let him be reminded, that where refinement is supposed to be exhibited in its most boasted state of advancement, it is no unusual thing to see a mixture of blood and fat stuffed into a swine's entrails, and

Blood Cakes.

served

served up at the tables of the great, under the name of CHAP. II. black-puddings; at which, perhaps, his own mouth has often watered.—Peace, therefore, to the poor Swede, who seasons his rye-cake with blood!

Between Smedbacka and Bommarsho, we entered the pro- Entrance of vince of Dalarne, or Dalecarlia. Here a botanist might amuse himself, amidst the supreme court of the Cryptogamia, by selecting, in their best dresses, the most luxuriant specimens of Fungi and Musci which perhaps he will find in all varieties and Europe. Every species of morel, in the most grotesque the Funguand forms, like a very buffoon of plants, and of uncommon size, grows here: also various kinds of Lycopodium, especially the complanatum and the annotinum:—the former, called jamna by the Swedes, and pronounced yemna, is the common tenant of all the sterile forests in Sweden: it is often used. by the natives, for giving a yellow dye to their wool. Of the morels, we observed, that in proportion as their growth was the more luxuriant, so much the more remarkable was the plant for its strange and misshapen appearance: it was hardly possibly to view some of them without laughing; so uncouth and ridiculous was their appearance: we might almost fancy that there existed a spirit of fun and caricature in the lowest order of vegetable beings. At Bommarsbo Bommarsbo we found only a single house. The owners were poor; but the accommodations were clean and good, and much superior to those of Smedbacka. In Sweden, as in Norway, every housekeeper

⁽²⁾ Phallus esculentus, Phallus impudicus, and Phallus caninus.

Candles.

CHAP. III. housekeeper manufactures his own candles; and some of Home Manu. these home-made candles were brought to us, as clear and white as if they had been composed of pure spermaceti. But what is more curious, they are often not made until after the traveller arrives. At Bommarsbo, they were made and sent in almost as quickly as they could have been procured at the great inns of Salt Hill or Marlborough, by an order given to a waiter.

Upon the 8th of November we left Bommarsbo, at eight A.M.

Russ-gin den.

Naglarby.

General Features of Dalecarlia.

with a view of a lake towards our right, which continued for some distance: and when we left it, a more distant view of lakes and islands extended towards the south-east. We changed horses at Russ-gården, and proceeded to Naglarby; passing, in our way, an extinct iron-mine, and also a place where there had been a foundry. As we drew near to Naglarby, the country was more open, well cultivated, and fully peopled. The general aspect of Dalecarlia is that of a level fertile plain, enclosed for agriculture, and surrounded by mountains. The village of Naglarby is situate in this plain, and surrounded by lakes and rivers. After we left it, we continued along this delightful plain for about two English miles, when we came to a ferry over the river Dal; and, in our way to this ferry, saw several tributary streams, in which a sort of stake-fences were set in all directions, as enclosures to catch the numerous fishes wherewith these waters abound. Our road from Naglarby to Fahlun was long and dreary, chiefly by the side of the Dal. Upon the left of our route we were shewn the residence of the woman who was nurse to the young king, Gustavus the Fourth.

The Court of Sweden chose for this purpose a Dalarne CHAP. 111. peasant; the females of this country being esteemed not only as the best nurses of Sweden, but as valuable servants in any Character of menial capacity in which they engage. Everything that a Dalarne man does, is thought better done than if executed by other hands: and, in their own opinion, the natives of this province believe that no people can compare with them. The number of births in Dalccarlia is surprisingly great: but as its produce is not equal to the support of one half of its population, the youth of both sexes are sent out to earn a livelihood in different parts of Sweden: afterwards they return home, as they do not choose to marry out of their own province. A Dalarne man always considers himself equal, in strength, prowess, and ability, to any two of the natives of the rest of Sweden. The antient language of the people, and their antient mode of dress, is still kept up among them. We were told that in the northern district of this Dialect. province a dialect is spoken closely resembling English; but the same may be said of other parts of Sweden: and more than once we had an opportunity of remarking, that when the Swedes offered examples of Swedish dialect which to them were almost unintelligible, either owing to their antiquity or to their provincial character, they were, on this account, the more intelligible to us; and so like to our old English language, that they differed from it only as the sort of English used by Robert of Gloucester, exhibiting the transition from the Saxon to the English language, or that which Rellenden.

⁽¹⁾ See Dr. Johnson's History of the English Language, in the Preface to his Dictionary. VOL. VI. R

CHAP. III. Bellenden adopted in his translation of Boëthius, differs from the English now in uses. The aspect of the country is not like that of Sweden in general, being more level and open: we thought it resembled Cambridgeshire. The old dance of the Dalecarlians is simple, and very pleasing: it is performed

- (1) Hector Bocce, or Bocthius, Canon of Aberdeen, wrote a History of Scotland in 1546: its translation, or paraphrase, was written by Bellenden, Archdean of Murray: and appeared in Edinburgh, in black letter, in 1541.
- "They use," says Dr. Thomson, " a dialect of their own, similar to that dialect of English which is spoken in the Lowlands of Scotland. It is reported, that a Dalecarlian who spoke this language, being landed near Aberdeen, was understood by the inhabitants." Trav. in Sweden, p. 202.
- (2) Holenius, of Fahlun, in the Dissertationes Academicae of Upsal, published a brief Vocabulary of the Dalarne dialect, shewing its relationship to the Gothic, Icelandic. Danish, Saxon, Teutonic, Vandalic, German, English, Greek, Spanish, Italian, Anglo-Savon, Franco-Theotisc, and Maso-Gothic. See the Section entitled " De Linguâ Dalcharlorum hodierna," in the Second Part of his Thesis " De Dalekarlia," printed at Upsal, p. 130.—Many other instances might be adduced, more striking to an English ear than those which he has mentioned; but among them are the following:-

DALARNE.	ICELANDIC.	ENGLISH
Bradda jentaculum apponere	. Braud	. Bread.
Dut Excrementum	. Drít	. Dirt.
Friosa Frigere		. to Fry.
Oron Seges	. Grion	. Grain.
Grass Gramen		. Grass.
Litta Capitis tegmen	. Hattur	. Hat.
$\mathfrak{Z}\mathfrak{g}$ $E\mathfrak{g}o$. E g	. 3.
Is Glacies		. Ace.
Tata Edere		. to Cat.
Knaif Culter	. Knijffw	. Knift.
Lyt Hepar	. Lyr	. Liner.
Biog Multum	. Piog	. Puch.
H iok Lac	. Abioolk	. Wilk.
Sälti Sal	. ⊕ aĭt	. B alt.
Ara Auris	Egra	. Car.

performed by three persons,—a man with two women, one on CHAP, III. each side of him, who alternately engage his attention, until the dance concludes by an allemande, in which, as by one accord, they all join. We have found occasion, in former parts of our journey in Scandinavia, to allude to the curious remains of customs which belonged equally to the Hyperboreans and the Greeks. Whoever attends to the rites and ceremonies of a Dalecarlian wedding, will be struck with their resemblance to the manners of the antient Greeks. Of this the Swedish writers have, in some instances, been themselves aware; although sometimes it may have led them erroneously to suppose that one nation owed its origin to the other, rather than that both were the descendants of one That we may avoid repetition, we shall Original use common stock. not again otherwise notice the curious Runic Staves, of which Staves. we met with more than one instance in the villages of Dalccarlia. That they are the same as the written rods mentioned in the earliest part of Sacred Scripture, has been already shewn, in a former part of this work. But the original use of them we found here sufficiently explained: for, like the staff of an Ataman among the Cossacks, they are still

^{(2) &}quot;Quod si comparatio accuratior instituenda foret Græcorum Romanorumque rituum cuca nuptias, in muitis Dalekarlorum ac veterum Hyperboreorum responderent." Ibid. p. 137. Conf. Heims Kringla Peringsk. tom. I. pp. 140, 557, 655. tom. II. p. 425 Verelii Not. in Hist. Herv c. 4. LL. Dal. Tit. de Matrim. sect. 1, & 2. Hæsna Thorir. 17, 18, 19. All. c. 6. Thorde Hredo, c. 17, 37. Liosvet. S. p. 17. Gunlaug. Ormst. S. p. 18. Wilhelm Siodz, c. 08, &c. Ol. Tryggw. c. 29, 42. Herraudz oc Bosc. S. c. 11, &c. Swarfdala, c. 17. Fig/a, c. 11, & 56. Rod. hin Spaka, c. 1. Isfird, c. 34. Codd. MS. in Arch. Antiquit. Holmensi; Jac. Gronovii Thes. Antiq. Gr. tom. VII, & VIII. J. G. Gravii Thes. Antiq. Rom. tom. VIII, & XII.

⁽³⁾ See Scandinavia, Part I. Chap XV. p. 554.

CHAP. III. still regarded as ensigns of office, and are borne in the hand, upon particular occasions, by the Elders of each village where they are found. The earliest Grecian annals seem also to allude to similar insignia, as the staves of the accredited agents of power'.

One

- (1) A passage in Dr. Fiott Lee's MS. Journal remarkably illustrates the use of these Runic Staves; which may have been alluded to by Homer, and are evidently the same as the sticks of the Tribes of Israel mentioned in Scripture:-
- "When Jupiter had occasion to despatch his courier, we are told by Homer that Mercury είλετο τὸ ξίφος τῷ δ'ἀνδρῶν ὅμματα θέλγει, τῷ κ. τ. λ. ταρτάρων κ. τ. λ.: and probably without this ensign of office which he took with him, he had no powers at all. His efficacy thence originated. He had no influence in his proper person. And, lo! this wand was but a piece of ivory!
- "When I was on the borders of Lapmark, in a peasant's house called Niemesele, on a lake side, I observed, hanging up, a square-sided stick about a foot long, with fine gilt-work and carving about it; and on one side were cut the following ten characters:



I was much amused with it, and asked them to part with it; intending to make them a small present, which, in my opinion, would be an equivalent; when it turned out that I might as well have asked the Lord Mayor for the city-mace: and judge of my surprise, upon hearing that it was the ensign of office in the village; that he who had it in possession, pro tempore, was the Chief, the Civil Governor of the village, which consisted of ten families, each of which had its own distinguishing mark;—that upon any very public and important emergency, which demanded the collected wisdom and experience of the heads of the families to decide upon, this stick was sent round to each family; and every head of a house, upon seeing his family-mark, immediately repaired to the house of him in whose custody the stick had been consigned, and there they all held their deliberations. In case they do not attend the summons, they are severally fined. No money therefore could have purchased it: and that which I at first regarded as an object of amusement, I found to be held an object of veneration.

Dr. Lee's MS. Journal.

One mile and a quarter before we reached Fahlun, we CHAP. III. turned a little out of the road, to visit the house in which Retreat of Gustavus Vasa remained concealed, and whence he afterwards effected his escape, by means of a privy. It is at a place called Stora Ornas. This house is now the property of a Colonel in the Swedish service, who has been at great pains and expense to preserve, as much as possible in its pristine state, this asylum of the great father of the Swedish Kings. They shewed to us the chamber and bed in which he slept; his clothes, weapons, coat of mail, and many other things, even to his watch and his Bible. His watch and coat of mail appeared to us to be the most curious reliques. The watch was of an oval shape, but the figures upon it were like those now in use. The coat of mail was like the armour used by the Circassians; and was perhaps manufactured in Mount Caucasus, where the natives still sell such articles of their manufacture to the Russians. It is a shirt of twisted mail, fitting close to the body, through which no common weapon could penetrate. We found the weight of it by no means insupportable for men of much less prowess than was the hero to whom it belonged. Upon a table in the room were laid several books illustrating the history of Gustavus Vasa and of the province of Dalecarlia. This chamber was ornamented with portraits, very indifferently executed, of the Kings and Queens of Sweden since the time of Gustavus Vasa. There was also an immense genealogical-tree, exhibiting their pedigree. In the same room were figures, as large as life, representing the Dalecarlians according to their antient mode of dress, with high-crowned hats, white woollen clothes, and

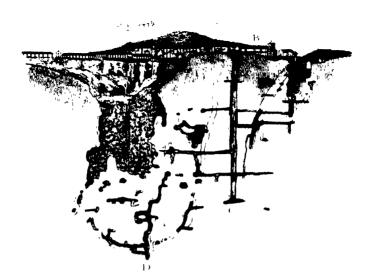
trowsers

CHAP. III. trowsers tied above the knee; bearing in their hands crossbows, and having each a knife and a grease-pot suspended from a belt. These they said were the images of the very peasants who assisted Gustavus Vasa in making his escape. They were represented with long beards, and reminded us of some of the natives of the Swedish Alps which we had seen in the province of Herjeådalen. Here there is also an effigy of Gustavus Vasa himself, placed beneath a canopy; and also of his page or esquire, in complete armour. bed and the canopy terminate upwards in a point, upon which is placed a coronet. The complete preservation of this building will shew to what a length of time the wooden houses of Sweden may be made to last, if they be kept dry and in good repair.

Approach to Lanna

From Stora Ornás to Fahlun, the roads, at this season of the year (November), are not good; owing, as we supposed, to the very considerable traffic which is carried on, in consequence of the mines, and the heavy burdens made to pass and repass. Upon our right appeared beautiful views of the Lake Runn. Just before we arrived at Fahlun, we had a prospect of the town, with all the buildings, machinery, and other works belonging to its antient mine; but in the midst of such columns of smoke, and fumes of sulphur, that it seemed as if the great bed of the Solfaterra, near Naples, had taken flight and settled in Sweden. descended towards the town, the houses appeared like so many tarred boxes, in the midst of a bleak and barren soil. We passed under the enormous moving levers which are employed in working the pumps. The wheels giving motion

to these levers are kept in covered buildings: they are CHAP. III. moved by over-shot falls of water, brought from the Lake The road leading into the town passes close to the External aspect of its Runn. edge of the stupendous crater which is now the mouth of its Copper-Mine. famous copper-mine. We shall say much more of it in the next chapter. Considered only as to its external aspect, it is one of the most surprising artificial excavations which exist in the world. Knowing of no other work of a similar nature with which to compare it, we shall call in the aid of the pencil to supply the deficiencies of verbal description: but the ingenious artist who has afforded to us the means of doing this, is himself unequal to the task of representing a scene of so much fearful grandeur. All the magnitude of this amazing result of human labour loses much of its effect by that minuteness of detail which is necessary to a faithful representation of the machinery belonging to the mine. While we are forced to acknowledge this striking defect in the best drawing we could procure of the Fahlun mine, we are consoled with the reflection, that even this will be deemed by our Readers much better than if no representation whatever were given of a work so renowned, and a scene so remarkable.



CHAP. IV.

FAHLUN TO SALA.

Antiquity of the Fahlun Mine-Assessor Gahn-Copper-ore-Descent into the mine-Conflagration-Method of excavating the ore-Manner in which it is found deposited-Accident which caused the present Crater—Tradition of the miners—Appearance of the descent -Names of the different openings-Increase of temperature in the lower chambers—View of the bed of fire—Council-chamber— Subterraneous stables—Stalactites of green vitriol—Pumps—Mode of dividing the ore-Value of the Shares-Bergsmen-Valuation of the Lots-Produce of the Works-Present state of the Fahlun Mine-Works above ground-Vitriol manufactory-Remarkable form of precipitated copper—Process for concentrating the hye-Subsequent crystallization of the salt-Town of Fahlun-Wood impregnated with copper-Punishment of "Riding the great horse" -Public buildings-Geological features of Dalecarlia-Säter-Mines in its neighbourhood—Hedmora—Curious floating-bridge -Nuptial festivities - Annual return of Dalecarlian Peasants -Avestad—Character of the Swedish Peasants—Broddebo—Custom in passing a Robber's grave-Sala-Mine of Salberg-Nature of the ore—Descent into the Salberg—Minerals—Town of Sala.

"THE Mine of Fahlun," we are universally told, "was CHAP. IV. worked before the Christian æra:" but who can pretend to Antiquity of determine any thing of Swedish history before the time of Mine. our Saviour? Much of the confusion which bewilders every research into the earliest Scandinavian annals has been caused by those writers who have laboured to establish a notion that this country was the original habitation of the Goths; whereas there is great reason to believe, that, in the beginning of our æra, the colony of the Goths, from whom the Swedes are descended, had not yet penetrated so far towards the north of Europe. Of all the ridiculous fables ever imposed upon a credulous world, that which would make of Scandinavia "the storehouse of nations" is the most absurd: it is fitted only for the pages and the readers of such an author as Sebastian Munster'. The first sight which a traveller has of the country is sufficient to remove every doubt upon this subject. Its unbroken forests, and a slowly advancing population, making the first essays of agriculture upon a land where there is not a vestige of any former inhabitants—excepting perhaps in the southern parts of this wild region, where a solitary Celtic mound, here and there, marks

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^{(1) &}quot; Howe populous was this Country and others lying aboute it, manye great and wyste men doo wythes, as Bethodius, Bartir, Iordanus, Gothus, and Paulus Diaconus, the which Aucthors do wryte that this people dyd swarme lyke Bees. And they call these North Regions the Storehouse or Sarnar of Nacions."—North's Description of Swedland, Gotland, and Finland, gathered out sundry laten Authors, but chiefly out of Sebastian Mounster. Imprinted at London, Anno 1561, by John Awdely.

⁽²⁾ And of these, no traces exist farther towards the north.

CHAP. IV. marks the sepulchres of a race of men who were never settled in the country, and with whom the Goths had no connexion,—afford manifest proofs of the erroneous opinions which have been propagated, and which still prevail, respecting its antient history. There are no writers, says Vertot', that are either so credulous or partial as those who have published an entire body of the Swedish history: if we may give credit to their relations, that kingdom is the most antient monarchy in the world. And he afterwards adds, -without undertaking to decide the celebrated question, whether Sweden be the original habitation or only a colony of the antient Goths,—it is certain there is no fixed æra, in their annals, until about the middle of the twelfth century. This period commences with the accession of Eric the Ninth: all the preceding annals are embellished with fictitious wonders, extracted from old legends or antient songs. The heroes and princes of those remote ages are always represented as giants and magicians. Force was the supreme law; the power and violence of an oppressor entitled him to the respect and esteem of the people; and it was deemed inconsistent with the honour of a prince to marry a princess before he had committed violence upon her person?. A fortunate murderer was not only admired as a hero during his life, but adored as a deity after death. In such a state of society,

⁽¹⁾ Histoire des Révolutions de Suéde, tom. II. p. 252. Paris, 1696.

^{(2) &}quot;Un Prince auroit esté déshonoré qui auroit épousé une Princesse qu'il n'auroit pas ravie." Ilid. p. 255.

society, it is not very probable that the inhabitants of CHAP. IV. Dalecarlia were engaged in mining speculations; or that any work was going on which required the aid of foreign commerce for its support. According to the authors of a late popular account of Sweden's, the oldest charter of the mine of Fahlun is that of Magnus Smeek*, in 1347; from which it appears, that anterior documents existed among the archives of the crown. But these writers do not seem to have been aware, that, above a century before the time of Magnus Smeck, there was another King of Sweden, of the name of Magnus, namely Magnus Ladislås, renowned in the Swedish annals for wiser counsels and for better sway; the same who caused the sovereignty of all the mines in the kingdom to be vested in the crown, and also accorded privileges to those mines, which seem to be the same they have alluded to. A record of the fact is mentioned by Loccenius, in his Antiquities of Sweden': and Messenius, in his learned and exact work.

⁽³⁾ Voyage de Deux Français dans le Nord de l'Europe, tom. II. p. 241. Paris, 1796.

⁽⁴⁾ Called, by the authors of the work above cited, Magnus Smek. He was the most unsteady, weak, voluptuous, and arbitrary monarch that ever wielded the Swedish sceptre; elected King of Sweden, A.D. 1319, at three years of age; and died in Norway, A.D. 1371. According to Loccenius, (Hist. Svecana, p. 106. Francof. 1676,) Magnus obtained the surname of Smeck, from his being duped by the specious promises of Waldemar king of Denmark. "Huic occasioni imminens Waldemarus, in Scaniam Magnum amicisamus literis illerit, et blandis verbis promissisque lactatum, unde Magno postea cognomen meek adhærebat," &c.

^{(5) &}quot;Vetustas tamen cœptæ effossionis quodammodo colligi potest ex Rescripto MS. Magni Ladilas, regis Sveciæ, Montanis Anno Mucleriv. Dicti Rescripti pars Latinè versa sic habet. Eò quod vestra privilegia et antiqua diplomata, quæ habebatis à nostris majoribus,

CHAP. IV. work', which enumerates, in chronological order, all the principal events of Swedish history to the beginning of the 17th century, notices the manner in which the sovereignty of the mines had been obtained. How long before that event this mine had been worked, or in what manner and in what age it was originally discovered, cannot now be ascertained. If any credit might be given to the traditions extant concerning it, all the copper employed by Solomon, in building the Temple at Jerusalem, was derived from the Fahlun mine.

> The situation of the mine is close to the town: there are few sights of the kind which better repay the traveller: he will seldom

> majorilus, nuper quum apud vos essemus, in curià illorum virorum, qui ea adservare deluissent, perierant, graviter errastis in eo jure, quo fodinæ metallicæ crigendæ ac stabiliendee erant. Deinde novo privilegio illud firmat."--- Johannis Loccenii Antiquit. Sveo-Goth. p. 82. lil. 2. cap. 17. De regni Sveo-Gothici fodinis metallicis. Francof. & Lips. 1676.

- (1) Johannis Messenii Scondia Illustrata, tom. II. p. 60. Stockholmiæ; Anno Christi, 1700.
- (2) The following extract from the Antiquities of Loccenius ought not, however, to be omitted:-
- " Certe illud verè affirmari potest, unà cum religione omnium aliarum rerum copiam, atque adeò ipsam felicitatem ad Gothos Sveonesque pervenisse. Satis constat, tum primum auri, argenti, ferri, cupri, cæterorumqué metallorum fodinas repertas: ut harnm rerum copià nulli cæterarum regionum cederent, cum antea nullam haberent. (Vastovius, in præfatione Vitis Aquilonaris, apud Loccenium, Antiq. Sveo-Goth. p. 83.) Ex hac verò ejus sententià ante DCCC. circiter annos (quo tempore Christiana religio huc primum introducta est) inventas primo fuisse metallorum fodinas, statuendum foret. Sed eas antiquiores esse, constat ex K. Suerris Saga, ubi hace exstant verba: 'JARNBER ALANDER UNDER SUIA KONG, OC VAR THA EN HBIDIT.' h.e. Tractus aut terri ferri fodinarum Sveoniæ Regi subest, nec tum adhuc ad sacra Christiana conversa erat. Unde patet jam in pagană religione anfe Christianam in usu certé notitia fuisse; licet sub Christiana religione magis magisque efflorescere potuerint." J. Loccenii Antiquit. Sveo-Gothic. lib. 2. cap. 17. p. 82. Francof. et Lips. 1676.

seldom find a mine of equal celebrity which, under all the cir- CHAP. IV. cumstances of depth and magnitude, is so easy of investigation: and perhaps in no part of the world will he meet with superintendants so well informed as those who preside over the works here; at the head of whom is the celebrated Gahn, whose acquire- Assessor ments, and the kindness he has always shewn to strangers, have entitled him to respect and consideration in all the Academical Institutions of Europe. We had letters of introduction to this gentleman, and therefore made it our first business to inquire for his place of residence, and to wait upon him. The reception which he gave us was of such a nature, that to pass it by without a grateful acknowledgment would be highly reprehensible. Hospitality in a Swede is what we may always expect; but the attention paid to strangers by Mr. Gahn, especially if their visits had any view to science, was of a more exalted nature. He not only shewed a zeal, as if actuated by a religious duty, to satisfy scientific inquiries; but he did more—he directed them; and himself endeavoured to stimulate the ardour or those with whom he conversed, when he found them engaged in the pursuit of knowledge, by exciting and then gratifying their curiosity; neither regarding the interruptions to which it rendered him liable, nor the fatigue he often encountered in being their guide, and himself descending with them during their examination of the mines. In the Fahlun Works, Mr. Gahn exercised the office of Assessor: under which title his name frequently occurs, in books of travels. The most interesting account of his character and abilities has been given by the celebrated chemist whose work we have before cited;

CHAP. IV. cited; and whose visit to Fahlun was made subsequent to our own'. Speaking of him, he says: "Perhaps it would not be bestowing too high a compliment upon Mr. Gahn, if I were to say, that he possesses the greatest quantity of general information of any man in Sweden. Nor are the frankness and affability of his manners inferior to his knowledge. I have seldom met with any person with whom I was more delighted." He was the intimate friend of Scheele and of Bergman; but his own discoveries have been very remarkable²: among which, the two principal were, 1. The discovery of the constituents of the earth of bones, which he ascertained to consist chiefly of the phosphate of lime; and, 2. The reduction of the ore of manganese to the metallic state.

> Having obtained, from the Master of the Works, permission for our descent into the mine, Mr. Gahn appointed his own son to be our guide and companion upon this occasion. Accordingly, we were conducted to an office for the sorting of minerals; before the door of which building we saw two large masses of pyritous copper placed, as specimens of the best ore of the mine. The moment we saw them, we recognised the sort of ore dug at Paris Mountain in the Isle of Anglesea: but all the European ores of copper are in this respect nearly allied. The ore is almost always in the

Copper-Ore.

state

⁽¹⁾ See Travels in Sweden, during the Autumn of 1812, by Thomas Thomson, M.D.&c. p. 222. Lond. 1813.

⁽²⁾ Ibid. p. 223.

state of a sulphuret; whether it be found in vertical veins CHAP. IV. amidst primary mountains, or stratified among secondary rocks, and accompanied by animal exuviæ. The tertiary deposit, in which copper lies with the remains of vegetable bodies, is perhaps not known in Europe; although it constitute the principal, if not the only mode of formation which characterizes the mines of Asia. At the sortinghouse, we were each accommodated with a suit of miner's Descent into clothes, made of black cloth; and immediately proceeded towards the place of descent, which is very carefully guarded. It consists of a small lodge; where two aged miners, Invalids, are stationed as sentinels, to see that no improper persons gain access, to pilfer, as they formerly did, from the chests and cabins of the miners below:—a precaution now rendered doubly necessary, since the mine was set on fire. This event occurred but a few months previous to our Conflagration. Some men attempting to steal a quantity of arrival. the sulphate of iron, with which the mine abounds, on being disturbed, fled, leaving their torches burning; by which means combustion took place amongst the timber of the works, which communicated to the parites; and has continued ever since, in spite of all the endeavours made for its extinction. At this time it was thought that the progress of the fire had been checked; but the mine sent forth sulphureous fumes, like a volcano; and it was greatly to be feared that the conflagration might extend to the lower part of the works, when the mine would inevitably be destroyed. Mr. Gahn however surprised us, by stating, that, notwithstanding all the disadvantages consequent upon this

CHAP. IV. this fire, if they can succeed in arresting its progress, and keeping it, as it were, under some kind of dominion, very considerable profit would arise from it, in the quantity of the sulphate of iron (green vitriol), which may be collected from the roasted pyrites. The mode which they have adopted for checking the fire, is by stopping up all the passages where it is found spreading, by means of a double wall; leaving only as much air as may be necessary to support combustion, in those chambers where its continuance may prove advantageous. In this lodge a small fire is kept for the use of the miners, who are here allowed to light their pipes, and to dry their clothes.

Method of excavating

the Ore.

We began our descent upon a Saturday, as early as eight o'clock A.M. Upon this day it is necessary to make the descent at an early hour; because fires are kindled in different parts of the mine every Saturday, about noon; which continue burning the whole of Saturday night, and all Sunday, with a view to soften the rocks, and facilitate their being wrought for the ore. Gunpowder was formerly used for blasting; but this is now applied sparingly: it being the opinion of the most experienced men in Fahlun, that a judicious application of the two methods succeeds better than either of them alone: for, as the blasting by gunpowder always leaves a certain number of irregular projections in the rocks, the subsequent process of applying fire to these inequalities tends to soften them, and to expedite the fall of the ore. The fires which are thus kindled every Saturday, are under the strictest regulations: the exact quantity of wood that shall be consumed is duly specified,

and, morcover, the precise portion of the rocks to which the CHAP, IV. several fires are to be applied. We were four hours diligently employed in the examination of the principal excavations. To go over the whole of the Fahlun mine, would, as Mr. Gahn assured us, require a fortnight. Before we endeavour to make the Reader further acquainted with what we saw, it will be therefore proper to give a general description of this vast bed of copper-ore, and of the manner in which it has hitherto been excavated.

The mine of Fahlun is an enormous crater, shaped like a sugar-loaf, with its point downwards; the same shape having been that of the natural deposit of the pyritous copper Manner in here found. The base of this enormous conical mass of ore, which the ore is found delying upwards towards the surface, was the first part worked. As the galleries for its excavation were necessarily extensive. and the props for supporting the roofs of the different chambers, consisting often of valuable ore, were of course left as sparingly as possible, it happened, from the avidity and carelessness of the workmen, that there was not enough left to sustain the pressure of the superincumbent matter towards the surface; and consequently, in the year 1666, the Accident whole of the upper part of the mine, that is to say, of the the present base of the inverted cone, fell in, and gave rise to the open crater we are now describing. The sides of this crater being variously coloured by the exhalations from the mine

of

and the action of the air upon its sides, added to the volumes

CHAP. IV. of smoke and vapour rising from the bottom, give it the resemblance of the Neapolitan solfaterra: but the depth of the Fahlun crater is much more considerable; there is more of vastness in all that belongs to it; and the singular appearance caused by regular staircases, traversing its whole extent, from the lip of this immense bason to its lowermost point at the bottom, renders it altogether a sight in which we may vainly seek for points of similitude, in order to compare it with other works. At the bottom of this crater, at the depth of forty fathoms from the surface, various openings lead to the different levels and places of further descent into the mine; which, according to the notion prevalent among the miners, were originally opened in immemorial ages'. It would be very curious, certainly, if it were possible,

⁽¹⁾ Ogerius, who was also conducted, during his visit to this mine, by the Gahn of his day, has left us, in his Ephemerides, a lively picture of the impressions made upon his mind by the extraordinary nature of the spectacle. His work, according to Du Fresnoy, is rare; but it is not possible to insert the whole even of the racy description he gives of his descent into the Fahlun mine: the following extract will however serve to shew the manner in which he introduces it; proving, beyond all doubt, that it was written by an Αθτόπτης.

[&]quot; Ipse provinciæ Præfectus et præcipui municipes ad fodinam nos duxerunt. Obstupuimus profectò, statim atque ad os præcipitii appulimus. O qualis facies, et quali digna tabella! Patet ingens terræ hiatus latissimus, profundissimus, quem in circuitum repagula lignea ambiunt, ne temerè quisquam ad marginem fossæ accedat, aspectuque profunditatis tantæ terreatur, ac corruat. Licet tamen his repagulis innitaris, si oculos in imum demittas, continuò caligent, turbanturque: si illos tandem intenderis, videbis homines euntes redeuntesque ima in fossa; at illi avium, aut potius formicarum speciem, referunt, adeo pusilli apparent. Quocunque convertas oculos, contemplaris res tam miras ex sese, quam inter se comparatas, ignes, glacies, splendorem, tenebras, permixta omnia: vetus illud esse Chaos diceres, adeo moles illa indigesta est, ac indiscreta: si curiosiùs advertas, deprehendes illic omnis generis colores æris, ferri, chalcanthi, sive vitrioli.

possible, to ascertain in what period the works were begun; CHAPLIV and with what nation the Swedes traded with their copper, after the mine became productive. Its original discovery is lost in obscurity and fable. The present inhabitants of Tradition of Fahlun relate the old story common to many famous mines, about a buck caught in hunting, whose horns were covered with an ochreous incrustation; and, in support of this, they allege the most prevalent names of parts of the Fahlun mine, all having reference to this animal; as Buck's-hill; the Buck's-shaft; the Buck's-horns; the Buck's-hoof; &c. But a similar story is told at Röråås in Norway; and also in other places where there are mines.

From the small lodge, serving as a sentry, upon the brink of the crater now mentioned, and stationed upon the top of the uppermost flight of stairs, we began our descent into the mine. These stairs are formed by nailing bars of wood across inclined planes, which slope downwards; and are thus so contrived, as to prevent the feet of horses from slipping, in their

vitrioli, sulphuris; PALLET HOC, VIRET ILLUD, RUBESCIT ALIUD, FLAVET ALTERUM et ut alia Deorum arma, aut insignia in Æoliá insulà conflata et procusa sint, HÎC CERTE PADRICATUS ES1, ASSERVATURQUE IRIDIS ARCUS. Satiabantur avide hoc spectaculo animi, oculique nostri; cum ecce tibi de repente quidam ex his operariis demittit se per funem, quo lapides, metallici trochleis, rotisque ab imà fossà in altum trahuntur: labi illum tam intrepidè, non sine horrore conspeximus cùmque illi inter labendum pileus excuteretur è capite, cubito ill im retinuit, adeo id securè agunt."

" Ergo descende sus in fossam per excisos, abruptosque in rupe gradus, &c. &c. . . . Postquam ad ducentos profunditatis passus descendimus, putavimusque in imo esse, sustulimus in altum oculos, eosque qui superius in margine fossæ erant, quia hominibus esse sciebamus, homines credidimus; cæterûm corvorum, aut cornicum species, nobis videbantur." Caroli Ogerii Ephemerides, pp. 196, 197, 198. Lutet. Par. 1656.

CHAP, IV. the descent.

their passage up and down. The view in descending the Appearance of platforms is very striking; the whole being open to daylight, and the sides of the great crater being diversified, like those of Vesuvius after some of its eruptions, with a rich contrast of beautiful colours. Above the brink of the surrounding precipices are seen immense superstructures of scaffolding, and other timber, impending over the abyss, for the purpose of working the buckets employed in raising the ore; and, dispersed in different parts of the crater, and along the sides of the platforms, appear the little huts and chests of the miners; serving as repositories for their clothes and working implements. When we had reached the bottom, we were met by two of the overseers of the mine, who came with lighted torches to conduct us into the principal level. Having entered into this opening, we found, after proceeding to a short distance from the mouth of it, some labourers who were employed in widening the passage. This was effected by means of gunpowder; and the force of the explosions, for blasting the rocks, shook every thing that was near to us. We afterwards visited many other parts of the mine. Every passage has its peculiar name; the level through which we entered being called Le bonnet rouge; another, The Jacobin; and a third, The Club of Hercules. The last, and deepest point of the work, towards the vertex of the inverted cone, or bed of the ore, they have denominated "Where now?" The rest of the

Names of the different openings.

⁽¹⁾ See the powerful description of this particular appearance, as given by Ogerius, in the passage already cited from his Ephemerides.

the appellations of the different divisions they have named CHAPLIV. after the Directors and principal officers, the members of the Royal Family of Sweden, or after any illustrious character or remarkable event which has occurred in the political world. And when the different parcels of ore are raised, they preserve the respective denominations of the parts of the mine whence they were severally taken. Passing into the deeper chambers, we at last arrived at the depth of 170 fathoms from the surface: but there are much deeper excavations; some of which have been carried on to the depth of two hundred fathoms. Here we found Increase of the heat very oppressive: the miners, with the exception of in the lower their drawers and shoes, were naked at their work. This high temperature, increasing always in the direct proportion of the descent from the surface of the earth, and which may be observed in all mines, has never been satisfactorily explained. In the great mine of Poldice, near Truro in Cornwall, which has been worked, in granite, to the depth of 300 fathoms, the miners, as at Fahlun, carry on their labours naked; and the heat is so great at the bottom of the mine, notwithstanding

the

(2) It may amuse the Reader to be informed what some of these names are; because they afford a sort of insight into the popular topics of interest among the miners of Fahlun at different periods. As specimens, we shall insert the following names of different parts of the mine, in addition to those already given:

Gustavus Adolphus The Mountain Lily. The Frigate. The Beaver. Mars. Count Jacob. The Victory. The Wife. The Matron. The Guitar.

The Repose. The Bishop.

Terra Nova The Brazen Serpent; &c. &c. CHAP. IV.

the accumulating water, that it may be sensibly felt by any person placing his hand against the sides of the rock, as the author himself experienced. The heat of the Fahlun mine is so great, that it becomes intolerable to a stranger who has not undergone the proper degree of seasoning which enables a miner to sustain it. But then there are causes which tend greatly to increase the natural temperature: prodigious fires are frequently kindled, and at a very considerable depth in the mine, for the purpose of softening the rocks previously to the application of gunpowder: add to this, the terrible combustion which has taken place in the mine, threatening its destruction. We saw the walls which they had constructed for opposing its progress; and the overseers, by opening some double doors placed in these walls, gave us a transient view of the fire itself, that was at this time menacing with its ravages the whole of these antient and valuable works. The sight we had of it was short; because the fumes of sulphur were so powerful, that we found it impossible to remain many seconds within the apertures'.

View of the bed of fire.

By

⁽¹⁾ The mode which the author adopted, and which enabled him to remain long enough to obtain a view of the combustion as it was then going on, was the same which he had been formerly taught by the guides of *Mount Vesuvius*, as a means by which a person may brave the gaseous exhalations of the crater of that volcano, and perhaps of any mephitic vapour; namely, that of covering the mouth and nostrils with a piece of cloth, such as the flap of a coat may afford, and inhaling the air, necessary for breathing, through its texture. In this manner, respiration may be carried on, for a short time, where any one would be otherwise liable to suffocation, and even in the midst of the most sulphureous exhalations: and as an attention to this simple precaution may be the means of saving the lives of those who are accidentally exposed to such situations of danger from suffocating or deleterious fumes, its introduction will not be deemed superfluous.

By rushing in for an instant, we saw enough to convince CHAP. IV. us what the fate of the mine would be, if the devouring element were not thus pent, and held in subjection by the smothering nature of its own exhalations. The moment any air was admitted from the doors, and the vapours were thereby partially dispersed, whole beds of pyritous matter appeared in a state of ignition; the fire itself becoming visible: but our torches were extinguished almost instantancously, and it was only by holding a piece of cloth before the mouth and nostrils that we could venture beyond the second door. If this conflagration should extend to a greater depth, the mine would be destroyed by the fumes alone; as it would become impossible to proceed with the works in the midst of its exhalations. A miner, lately, in advancing unguardedly and with too much precipitation towards the ignited matter, to ascertain the extent of it, fell dead; being suffocated, as was the Elder Pliny, and in a similar way. It is this part of the mine, in which we approached nearest to the bed of burning pyrites, that bears the name of "the Club of Hercules." At the depth of 170 fathoms we were conducted into a large open chamber, or cave, in which fifteen naked miners were actively engaged, carrying on their labours. The heat and suffocating nature of the fumes in this place were so powerful, that although the mine extends thirty fathoms lower, we found it necessary to begin our re-ascent, being very much exhausted.

In the deepest recesses of the mine there are stables for Subterraneous horses, in which these animals are kept in total darkness, and for months together, without ever seeing the sun's light.

Councilchamber.

CHAP. IV. Near the stables are also repositories for their fodder. At the lowest point of our descent, or near to it, we were shewn the Council-chamber, as it is called, where the officers belonging to the mine, the engineers, and others engaged in the works, hold their assemblies, and take their refreshments, when they descend to inspect the operations. This chamber is a circular cave, wainscotted, and furnished with a table and benches. An iron chandelier hangs from the roof, over the table. Gloomy as this cavern appears, many of the Swedish monarchs have sate within it. An old custom has ordained, that every Swedish king should once, at least, during his reign, pay a visit to Fahlun, and descend into this mine: consequently their names appear inscribed upon the sides of the chamber. We noticed also the names of other distinguished individuals, either carved or written, both of natives and foreigners', who had honoured this apartment with their presence, and left a memorial of their After we quitted the Council-chamber, we visited the stables, in which several horses were then stationed, and quietly enjoying their fodder, at the depth of 160 fathoms from their natural pastures. They seemed to be in as good condition, and as cheerful, although literally buried alive, as any of those which are kept above ground. Their loud neighing, echoing along the arched caverns, as we ascended from the lower parts of the mine, proved that habit

⁽¹⁾ Among others, we read the name of Joseph Acerbi, from Castelgoffredo in Italy; and his companion, Signor Bernardo Bellotti, of Brescia.

habit had quite reconciled them to their gloomy abode. CHAPLIV. Some of them were fat and sleek: and certainly the temperature of the place where they are kept is as high as the most fastidious groom would require for giving to his steeds a shining coat.

Among the other curiosities of the Fahlun mine, not the Stalactites of least curious are the stalactites of green vitriol, the sulphate of iron, which, in all parts of the works, may be observed in greater or less abundance, hanging either from the arched roofs of the levels, which are constructed in many places with brick-work, or upon the wooden ducts for carrying off This is the substance which the workmen the water. sometimes seek to convey away by stealth: in attempting which, as before mentioned, the mine was carelessly set on fire. It appears either crystallized, or as an incrustation, or in other stalactite forms, sometimes as big as a man's arm.

The whole of this vitriol,' and all the vitriolic water of the mine, are the property of Assessor Gahn; and, of course, the removal of these stalactites, without his orders, is pro-The manner in which they are produced may hibited. be briefly stated: although it be now well known to all chemical readers; a similar process for the precipitation of copper constituting a very profitable part of the works in our own mines, especially at Paris Mountain in the Isle of Anglesea. As in that mine, the water of the mine at Fahlun is impregnated with sulphuric acid, holding copper in solution:

but

⁽²⁾ Specimens of it were brought away, which are still in the author's possession.

Pumps

CHAP. IV. but in its passage through the works, whenever it comes into contact with iron, for which the sulphuric acid has a greater affinity, a portion of the iron is dissolved, and copper consequently is precipitated. The liquid sulphate of iron being then exposed to evaporation, is gradually concentrated; and either crystallizes, or appears in beautiful transparent stalactites in different parts of the mine. But the product of this deposit is trifling, compared with the quantity of the same salt which is procured from the vitriol works on the outside of the mine; to which the water of the mine is conveyed by pumps, as we shall afterwards describe. The working of pumps, in the profoundest cavities, at such remote distances from the power which maintains their action, is, in all mines, one of the chief objects of wonder to a stranger who descends merely to gratify his curiosity, and is unaccustomed to the view of mechanical contrivances, by which a moving force, so extraordinary in its nature, may be communicated. But in this part of the works, the Swedes are far behind the English: the vast powers of the steamengine was as yet unknown to them; nothing of the kind having been introduced into their mining establishments.

Mode of dividing the Ore.

Fahlun mine is divided into twelve hundred different shares, or, as they are here called, "Actions." The instant any ore is raised, a division takes place: but to give a full account of the manner in which the division is made, the mode also of defraying the expenses of the mine, together with all its bye-laws and regulations, would extend the description far beyond the limits prescribed by a volume of travels. Every thing is conducted upon the best and most effectual

effectual plans. A number of shares may belong to the CHAP. IV. same individual; but their value varies so extremely, that it is not possible to form an average of the yearly value of any one of them. For example; the net profit of a single share value of the at the time of our visit, estimated for the whole year, was not more than sixty rix-dollars; but there have been times when the annual value of a share has doubled that sum. It is not every possessor of shares or "actions" that is allowed to collect his own portion of the ore, or to estimate its value. There are a certain number of persons who are privileged: and these are called Bergsmän; literally Bergsmen. signifying "Mountaineers," but perhaps more properly translated Mineralists, or Miners'. Here, however, it has a higher import. The Bergsman must become qualified for his office, and for the privileges he enjoys; first, by having passed the ordeal of a regular examination; secondly, by the possession of a certain portion of landed property. He must, moreover, have other qualifications, before he can be entitled to the rank of Bergsman. Those proprietors who are not Bergsman are obliged to let their shares to persons who are of this class, for a certain sum annually. Of the twelve hundred sharers, sixty only are Bergsmän; and the whole aggregate of twelve hundred shares is subdivided into seventy-five lots, for the convenience of dividing the ore; each lot of the seventy-five containing sixteen

⁽¹⁾ In the Dictionarium Anglo-Svethico Latinum of Screnius, printed at Hamburgh in 1734, a mine is called gruftua; a mineral, main; and a mineralist, burgsman. In the same work, a mountain is expressed by burg.

Valuation of the Lots.

CHAP. IV. sixteen shares. When, therefore, any of the ore is raised, it is divided into twelve portions: and as it is necessary that four of these twelve portions should go to defray the expenses of the mine, the remaining eight portions allow for the sixteen shares, one half of each portion for every share. The next business is, to estimate the value of the ore; which is done in the following manner. The $\frac{4}{10}$ ths which have been set aside for defraying the expenses of the mine are separately put up to auction. At these auctions, nobody but Bergsmän is allowed to bid; and whatever the first lot sells for, is the value of the rest of the $\frac{8}{10}$ ths. But should it so happen, that an inexperienced bidder appreciates too highly the first portion of the $\frac{4}{12}$ ths, every sharer possessing $\frac{1}{12}$ th may compel that person to buy his share likewise at the same price. In the public office belonging to the mine, a regular account is kept of every Bergsman's profits, and of the deductions to which they have been liable; and this fair statement is daily open to public inspection. Of the twelve hundred shares, into which the whole produce of the Fahlun mine is divided, three-fourths are distributed in the town of Fahlun and in the province of Dalecarlia. The remaining onefourth belongs to proprietors who are dispersed in the kingdom at large, and in other countries; insomuch, that there are persons residing in America who possess shares in this mine. The Company pay one-eighth of the whole produce to the king. In the period of its greatest prosperity, which

which was about the year 1651, the produce amounted to CHAP. IV. 20,000 schippunds in a single year; but since that time it Produce of has constantly diminished, and now yields only from three to four thousand schippunds annually. As the produce of the mine has been diminished, so also has the number of workmen been lessened: the number of the miners now does not exceed four hundred persons; and if we include all those who are employed in the foundries and other works, the number will not exceed one thousand.

the Works.

From the description already given of the form of this Present state bed of ore, as well as in surveying the products of the Mine.

works during the last century, it must be evident that the Fahlun mine approaches to its termination. They have already reached the lowest point of the inverted cone; and have penetrated deeper than the ore, under a rather ludicrous notion, founded upon some visionary speculation, that if they persevere perpendicularly from the vertex, they will at last reach the top of another conical mass of ore, situate in an opposite direction; and which gradually swelling out towards its base, instead of diminishing from it, as in the present instance, will amply repay them for all their trouble. These hopes appear to be altogether illusory. However,

much

⁽²⁾ The schippund of Stralsund equals twenty lispund, or 280 pounds According to Dr. Thomson, (Trav. in Sweam, p. 221,) in the year 1600, the Mine of Fahlun yielded eight millions of pounds of copper. The same author also informs us (p. 222), that as much copper is obtained from the mines of Great Britain alone, as from all the rest of Europe.

⁽³⁾ See the Vignette to this Chapter.

CHAP. IV.

much remains to be done, before the mine, even in its present state, can be exhausted. In working a mass of such magnitude, quantities of ore have been left in the sides and along the cavities of the mine: much, therefore, yet remains to be removed. The only difficulty will be, how to accomplish its removal, without causing a repetition of the catastrophe which gave birth to the present crater. During the year before our arrival, a considerable portion of one of the sides gave way, and fell down, with a prodigious noise. This accident occurred upon a Sunday, when the workmen were absent from the mine; and, providentially, no lives were lost.

After a subterraneous expedition of four hours, we returned again to the upper regions and to the light of the day; and were conducted, as before, to the office, where we changed our clothes. Afterwards, we went to the house of an officer who is called the *Mine Mechanician*, to see some drawings and plans of the works. We then visited the *Pump-room*, and saw the machinery for draining the mine: it is all worked by water-wheels; yet there is no place better suited for the use of steam-engines. Mr. Gahn told us they had recently discovered a bed of *pit-coal*, but that they made no use of it. Formerly, when the mine was richer, they made no use of the *iron pyrites*, which is dug in considerable quantity; but

Works above ground.

now

⁽¹⁾ See A, of the Vignette to this Chapter.

⁽²⁾ Here we procured those Designs which have been engraved for this Volume; with the exception of the View by Martin, which was procured in Stockholm.

now a work is established for roasting this mineral, and CHAP. IV. manufacturing red-ochre as a pigment. In this process, however, they are not so economical as they might be: the sulphur, which might be collected, is allowed to escape'. The process for the peroxidation of the iron is extremely simple: it is obtained from heaps of decomposed sulphurets, or, as they are commonly called, pyrites, which have been long exposed to the action of the atmosphere. Of these a lixivium is made; in which a yellow mud subsiding, affords the ochre, which is submitted to the action of heat in a long furnace; so contrived, as that the flame, drawn out to considerable length, may act upon the iron oxide, and thus convert it into red ochre.

At some distance from the mouth of the mine, an immense Vitrol Mac apparatus, visible over all the environs of Fahlun, for the manufacture of copperas or green vitriol (sulphate of iron), is seen making a conspicuous figure among the other prodigious works of the place. This machine was constructed by Assessor Gahn, to whom all the vitriolic water or the mine, after the precipitation of the copper, exclusively belongs. The method is said to have been originally devised in Germany, for the concentration of weak salt-brines'. The principle of it is very simple, and shall be fully explained; although similar works, and perhaps upon a larger scale, may be found

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⁽³⁾ Assessor Gahn has since devised a very simple apparatus for obtaining the sulphur. See Thomson's Travels in Sweden, p. 219.

⁽⁴⁾ Ibid.

Remarkable form of Precipitated Copper.

Process for concentrating

the Lyc.

CHAP. IV. in our own country. The vast profit derived from the chemical changes which the water of the mine is made to undergo, after it has been drained by means of pumps from the works, has been owing entirely to the advancement which chemistry has made of late years. First, copper is abundantly precipitated from it by means of iron: and this wash-copper, as it is called, of the Fahlun mine, has an appearance so extraordinary, that when it was shewn to the late Professor Tennant, he would not credit the fact of its being merely a precipitate of the native metal by means of It consists of spheroïdal particles of native copper, of such perfect forms, that they seem like so many minute beads of metal which have undergone fusion. After the copper has been thus precipitated, the water, holding sulphate of iron in solution, is conveyed to the reservoir for the manufacture of vitriol. The base of the immense apparatus used for this operation is a wooden stage or platform, shaped like the roof of a house, sloping, on either side, towards wooden troughs, like those used to catch rain-water from the houses in England. Above this platform a double wooden rack, resembling those used for drying the harvest in Norway and Sweden', is made to extend the whole length of the sloping platform; which is covered with birch-boughs, thickly interwoven, and hanging over one another from the top to the bottom, so that a person walking between the two racks has a lofty wall of wicker-work on either side. The water

is

is pumped into a trough upon the top of these racks, CHAP. IV. extending the whole length of them; and out of which it afterwards falls into a number of lesser channels, whose sides are notched, so as to let the water drop gently, in a continual shower, upon the wicker boughs. As it thus Subsequent falls, presenting such a multiplicity of surfaces to the action of the salt. of the atmosphere, it becomes of course liable to considerable evaporation; and the salt which it contains becomes, to a certain degree, concentrated before it reaches the bottom. An incrustation of sulphate of lime also forms upon the boughs, which thus become covered with gypsum, after the manner in which osteocolla is formed by the carbonate of lime near Tivoli and Terni in Italy. The concentrated fluid, containing sulphate of iron, at length reaches the bottom of the wicker-work, where it falls upon the sloping platform, which carries it off on either side into troughs, whence it is conveyed into a cistern: it is then raised by pumps again to the top of the machine; the same operation being repeated seven times,—the quantity of fluid always diminishing during every descent over the boughs; until at length it is in a fit state for the process of crystallization, which takes place in cisterns prepared for the purpose; but it is further accelerated by the last process, which consists in boiling the fluid, when it becomes so highly concentrated, that by placing rods about two feet in length into the liquor, they become studded with large and transparent green crystals of the sulphate of iron, which are then collected into barrels for exportation, and chiefly sent into Russia; as almost all the other markets in Europe are supplied with this commodity from VOL. VI. x

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CHAP. IV. from England, at a lower rate, and of a better quality. During the last process of boiling the liquor, a small portion of copper is again precipitated, notwithstanding the precipitation of the metal which had been previously effected by means of iron, which is the perquisite of the Assessor; who always, as proprietor of the vitriol-works, obtains annually a small quantity of wash-copper from this manufacture, however carefully the process for the Company's precipitation of wash-copper may have been conducted.

Town of Fahlun.

Fahlun is a dirty town; and, except in the art of mining, is at least two centuries behind the rest of Europe in refinement. The inns are beyond description filthy; and the Table d'Hôte abominable. We dined there but once: the soup was full of hairs; and the smell of the meat was so offensive, that the guests were driven from table. The houses of the Assessors, and other officers of the mine, are, however, neat, and their owners polite and hospitable. We experienced the truth of this, in the highest degree, in the attentions and kindness shewn to us by Assessor Gahn and his son. The atmosphere of the town is almost intolerable to a stranger; yet we were assured by the inhabitants that it is wholesome, and that the people of the place live to a very advanced age; -a statement that we could not easily credit, as there appeared to us hardly a single individual who could refrain from coughing and spitting; and the effect of the air of this place was felt by us very sensibly for some days after we left it. In fact, it is not only sulphureous fumes that are inhaled in the neighbourhood of the Fahlun mine; the exhalations are almost as various as the products of the mine; and were it not for the convincing

convincing proofs afforded by Assessor Gahn, who obtained CHAP. IV. copper, by analysis, from the beams of the houses in Fahlun, Wood ima traveller might be suspected of exaggeration who should with Copper. affirm that the timbers of the buildings here, in the course of thirty years, are worth working for the quantity of this metal which they contain. One might almost fancy that the inhabitants, owing to their copper-coloured countenances, had become, in a certain degree, themselves cupreous; for they may be considered as actually eating, drinking, and breathing copper. They have copper above, below, and on every side of them; and smoking heaps of iron pyrites impregnate every gale with their suffocating vapours; as if the curses denounced against the disobedient Israelites had here been made the means of industry, and the instruments of wealth and happiness:-"Thy heaven that is over thy head shall BE BRASS, AND THE EARTH THAT IS UNDER THEE SHALL BE THE LORD SHALL MAKE THE RAIN OF THY LAND POWDER AND DUST: FROM HEAVEN SHALL IT COME DOWN UPON THEE."

Close to the great crater of the mine there is an Punishment enormous wooden image of a horse, elevated twelve or the Great fifteen feet from the ground. Upon this image the miners who have been guilty of misconduct are placed, by way of punishment: and hence, perhaps, originated the old adage among our ancestors, which contains a caution against "riding the great herse." Besides copper and vitriol, the mine of Fahtun produces, in small quantities, both silver and gold. Its other minerals are many of them peculiar to the spot. We collected several; and a list is subjoined,

Substances for which this mine and its neighbourhood are Public Buildings.

Substances for which this mine and its neighbourhood are

Fahlun contains six thousand inhabitants. It has several public buildings; and among these the following may be mentioned as the principal:—

- I. THE TOWN HALL.
- II. Two Churches.—One for the inhabitants of the town, and the other for the parish at large. The town church is covered with copper: but a more improper material can hardly be used; for the sulphuric acid gas, with which the air is powerfully impregnated, is rapidly dissolving this copper covering. The same thing happened at the parish church, where copper had also been employed for the roof: it was

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^{1.} Dodecahedral crystals of garnet. Engeström says, "Plus gros que le poing:" but we obtained specimens that are double the size he mentions.

^{2.} Octahedral crystals of magnetic iron-oxide.

^{3.} Massive loadstone.

^{4.} Native sulphate of iron; blue, green, and white.

^{5.} Sulphuret of copper in primary crystals.

^{6.} Precipitated native copper in spherical particles.

^{7.} Argentiferous and auriferous sulphuret of lead, crystallized.

^{8.} Pot-stone.

^{9.} Mineral pitch.

^{10.} Amianthus.

^{11.} Laminary sulphuret of zinc.

^{12.} Automalite, in octahedral crystals.

^{13.} Fahlunite, crystallized in hexahedral prisms.

^{14.} Pyrophysalite, a curious variety of topaz.

^{15.} Gadolinite.

^{16.} Leelite.

In this list it has not been deemed necessary to specify all the varieties of the common sulphurets of copper and iron. They are of course abundant.

so speedily corroded, that its removal became necessary, and CHAP. IV. the cooper was sold.

III. THE FREE SCHOOL.—This is open to all the children of the inhabitants. It contained at us time, one hundred and thirty boys. These children are instructed in the Hebrew, Greek, and Latin languages: they are also taught history, geography, writing, and arithmetic. The mathematics are not taught; because from this school the children generally proceed to the Gymnasium at Westerås; whence they are afterwards removed to Upsal, to finish their aducation.

1 THE IM LARETTO, or Hospital for wounded and invalid This bolding with several other public edifices, is situate near the m. th of the mine.

V. THE PUBLIC GRANARY.

About a mile and a quarter from Fahlun is Gryksbo Papermanufactory. This work was begun in 1740: it affords employment to one master, six labourers, and four boys. There is also a cloth manufactory, under the direction of the same proprietor.

The geological structure of Dalecarlia has been described Geological by Hisinger; whose imperfect and unsatisfactory account of Datecurlia. it was compared by Professor Thomson with his own accurate and personal observations upon the spot. The inference which the latter was thereby enabled to deduce, was this; that the basis of Dale carlia consists of primitive rocks; but that

⁽²⁾ Thomson's Trav. in Sweden, p. 215. Lond. 1813.

CHAP. IV. that the greater part of the surface consists of floetz rocks, especially sandstone and limestone, containing the usual organic remains which distinguish floctz limestone. The porphyry, which sometimes alternates with these rocks, belongs also to the floctz formation. The whole surface of the plain on which the mine is situate, is thick strewed with immense boulders of granite, quartz, feldspar, hornblende, and chlorite-slate; but not a single rock is to be seen in sitû in the whole plain, except two immense pyramids of quartz lying in the excavation at the great opening of the mine. The rock, however, which, after a good deal of laborious research, Professor Thomson found to environ Fahlun, is a particular kind of feldspar, without quartz or mica, traversed by veins of hornblende, six feet in breadth. He also observed that the rocks on the east side of the mine, at the distance of some miles, are gneiss; and, from the minerals which accompany the copper-ore, such as actinolite, tremolite, chlorite, and from other circumstances, he concluded that the mine follows a series of veins in mica-slate, the vein-stones appearing to him to consist chiefly of quartz³. In deference to his authority, it has been thought right to insert his observations. To us the appearance, as far as relates to the position of the ore, was somewhat different: it seemed to be deposited in detached beds, rather than in veins; as at Paris Mountain in Anglesea:

⁽¹⁾ Thomson's Trav. in Sweden, p. 215. Lond. 1813.

⁽²⁾ Ibid. p. 220.

⁽³⁾ Ibid.

Anglesea: and hence the spacious cavities of the chambers CHAP. IV. in which the ore is worked, resembling rather the caverns of a salt-mine; than the narrow galleries and passages worked in mines where copper-ore occurs in veins.

We left Fahlun on Sunday, November 10, for Sala; and in the evening reached the small town of Säter, remarkable sater. only for the cataracts near which it is situate. At a poor and small inn in this place they demanded the extravagant price of seven rix-dollars and a half for our night's lodging. The master of the house brought us a few minerals from the neighbouring mines, which we bought of him. The valuable Mines in its iron-mine of Bispherg is at a small distance from Säter: it had produces a rich granular and very friable magnetic iron-oxide. In the same mine is also found molybdena. There are also other mines in the neighbourhood of Säter'; as one of silver and copper in the parish of Skedvi, which produces a small quantity of native silver; distant about six English miles: also the iron-mines of Garpenberg' and Grungesberg', which are more remote.

Leaving

⁽⁴⁾ A deserted mine, called Silberberg, near Sater, now inundated with water, was worked with great success, in the reign of Queen Margaret, for the silver found there. The ore in the eastern part of the mine contained from 28 to 30 grains of gold for every pound of silver. If the pits could be drained, this mine might again prove very profitable.

⁽⁵⁾ At Garpenberg, the minerals consist of varieties of sulphuretted copper; sulphuret of lead; sulphuret or zinc; finate of lime; pot-stone, containing garnets; actinote; quartz, mica, &c.

⁽⁶⁾ At Grängesberg may be had the following minerals:

^{1.} Black massive magnetic iron-oxide.

^{2.} Granular ditto.

CHAP. IV.

Leaving Säter the next day, we set out for Avestad, where the copper of the Fahlun mine is smelted. The axle of our carriage had been broken; and being obliged to leave it behind, under custody of our Swedish interpreter, we proceeded from Süter in hired carts. After we had left this dull and dirty town, we saw in the forest the bodies of some criminals exposed upon wheels near the road, after the manner of the country, as represented in a former volume. Our first stage was to Grådö, by Hedmora. Corn, at this time (Nov. 11), was yet standing in the fields: the country appeared to be much cultivated, and very populous. Hedmora is a dirty village, but beautiful in its situation, upon the side of the Dal, which here spreads out its waters so as to resemble a fine lake. Several houses are stationed upon little sand-banks in the midst of the water. We crossed the river near Grådö, by a floating-bridge two hundred and eighty yards in length; not supported, like the floatingbridges in Germany, upon boats, but solely by the trunks of trees lashed together. Here, while we were changing horses.

Hedmora.

Curious Floating. Bridge.

^{3.} Micaceous iron-oxide, of various beautiful hues; blue, green, and yellow.

^{4.} Octahedral crystals of iron-oxide, imbedded in massive magnetic iron-ore.

^{5.} Mineral pitch.

^{6.} Comolite, or pot-stone.

^{7.} Hexagonal crystals of lime-spar, associated with quartz crystals.

^{8.} Feldspar in magnetic iron-oxide.

Q. Amianthus.

^{10.} Decomposed pyroxene, commonly called " green earth."

^{11.} Quartz, mica, calcareous spar, &c. &c.

⁽⁷⁾ See Part III. Sect. I. p. 510.

horses, we heard the sound of musical instruments, as if a CHAP. IV. band were approaching; and presently two carts, bearing the Nuntial Fesperformers, and filled with other men and women, decorated with ribbands and a variety of gaudy trinkets, entered the yard of the inn. The appearance of these merry-makers was most grotesque. Each cart was conducted by a single horse, upon which sate the driver, more than "half-seas over," playing upon a fiddle, the most common musical instrument of Norway and Sweden. The carts were crammed with boors of both sexes, having their hats and clothes bedizened with nuptial favours, who, with the most ludicrous grimaces, some fiddling, others singing, were endeavouring to express their rude mirth by all sorts of gestures and noises. They had been to a wedding, celebrated at a great distance from Grådö, the day before, Sunday. We asked them to dance; and they consented, upon the condition of our treating each of them with a dram of their favourite beverage, Swedish brandy flavoured with anisced. The whole party then prepared to exhibit their agility; and we expected to be gratified with a sight of the curious old provincial dance of the Dalecarlians. But they began with Waltzes; and after swinging each other in whirls, with a degree of violence that made an approach rather dangerous, ended in the graver measures and attitudes of the Minuet, which we found much better suited to the sort of doubtful equilibrium maintained by most of them: with the Minuets the dance ended. Of such a nature were the scenes that afforded to some of the best masters of the Flemish school subjects for their pictures; nor were the objects very dissimilar which called VOL. VI.

CHAP. IV.

called from the pen of our matchless Goldsmith one of the most pleasing expressions of his humanity and benevolence'.

Annual Return of Datecar han Peasants. Soon after leaving Grådö, the country was again covered by forests, and our views bounded by the trees. In these woods we met several female Dalecarlian peasants, returning from their annual summer excursions, into the south of Sweden, for employment; but in their winter clothing, made of sheep's fleeces, with swathings of white linen round the head. We passed another floating-bridge about a quarter of a mile from Avestad, which was literally covered by Dalarne peasants, returning, as before mentioned, to pass the winterseason in their own country. The dress of the men is the same as it was in the time of Gustavus Vasa:—a suit of what our English wags would call dittos, like the dress worn by Quakers; made wholly of white woollen;—in which they appear clad from head to foot; a leathern belt around their waists, and, upon their heads, low broad-brimmed hats.

Avestud

Besides the smelting-works for the Fahlun copper-ore, at Avestad, here there is also a mint for the copper coinage of Sweden, some iron-foundries, and other works. The town is situate close to some striking cataracts of the River Dal, which at this season of the year were truly tremendous; not from the height of the fall of water; for this is comparatively nothing; but owing to the prodigious force and fury with

^{(1) &}quot;The poorer the guest, the better pleased he ever is with being treated: and as some men gaze with admiration at the colours of a tulip, or the wing of a butterfly, so I was by nature an admirer of happy human faces." Vicar of Wakefield, Ch. I.

with which the torrent was impelled; menacing with devas- CHAP. IV. tation and ruin every thing in its way. The works belonging to this place exhibit nothing which merits a very particular description; nor are they worth a traveller's notice, unless he be curious to see the condition of the arts in a rude and unimproved state. The iron forges are such as were used in England some centuries pero; when a single hammer, moved by an overshot-wheel, constituted the only machinery used in our iron-works. The copper of course, requires a more elaborate process, and here undergoes the several operations so well known in our country, by which the metal is extracted from its ore, and rendered fit for the purposes of But in all this the Swedes are far behind Great the mint Britain. The die, for example, is effected entirely by m val labour, without any aid of machinery: it is impressed by a blow given with a sledge-hammer; a boy being stationed

⁽²⁾ This opinion is perhaps at variance with he accounts given of the method of smelting copper in Sweden by other writers: it is here stated as the author entered it into his Journal, at the time, and upon the spot. In Great Britain alone, as much copper is obtained from its mines as from all the 1st of Europe put together; and more iron is raised, in one year, in the single privoipality of Wales, than in the whole kingdom of Sweden. But the copper-mine of Fan^{ij} is the property of many individuals; and there are various methods used in the ope or of smolting the ore, as best suited to the circumstances of the different smelting-houses. Dr. Thomson considered the Swedish process as "very simple and economical, and as having the advantage over the methods employed to reduce he same kind of copper-ore in Anglesey." (See Trav. in Sweden, p. 222.) The ore is first roasted, for the evaporation of the sulphur; then mixed with charcoal, and melted in a blast furnace. The produce of this furnace is afterwards roasted four or five times successively; then again melted, and the scorize separated. Afterwards, it once more undergoes fusion, and is cast into bars. (Ibid.)

CHAP. IV. stationed at the work, to shift the coin, and supply the unstamped pieces of copper.

Character of the Swedish Peasants.

We were comfortably lodged at Avestad; the cleanly accommodations of the house, and the obliging behaviour of its owners, being alike praise-worthy: and when, on the following morning, we called for our bill, they said they had no demand to make; we might give them whatever little remuneration we thought proper. As the same circumstance often happened to us during our travels in Sweden, we have thought it right to mention it. Instances of exorbitant charges may sometimes occur; we had recently experienced an example of this nature in the behaviour of the persons who kept the small inn at Sater; but such cases are not common in Sweden, especially in those parts of the country north of Stockholm; neither is it the characteristic of a Swede to conduct himself with dishonesty in his dealings with At the same time, it is not intended to be mainstrangers. tained that rogues and thieves are never met with in this country, as in all others. Highway robberies have sometimes been committed; and we shall soon have occasion to notice proofs of this, which occurred in our journey to Sala: but such events are exceedingly rare, and may have been committed by foreigners employed among the multiplicity of persons engaged for labour in a mining district. Upon the whole, it is very different from what happens in Russia, where a stranger is obliged to be upon his guard against every one he meets, of whatsoever rank or condition; and where "theft" may be considered as a sort of standing order of the day.

Upon the 12th of November, leaving Avestad, in our CHAP. IV. first stage to Broddebo we passed the boundary between Broddebo Dalecarlia and Westmania or Westmanland. Here, in the Custom in forest, by the road side, we observed several heaps made Robber's Grave. with sticks and stones; upon which the natives, as they pass, cast either a stone, or a little earth, or the bough of a tree; deeming it an uncharitable act to omit this tribute, in their journeys to and fro. As this custom appeared closely allied to the pious practice in the Highlands of Scotland, of casting a stone upon the cairn of a deceased person, we, of course, concluded that these heaps were places of sepulture; which was so far correct, but they were not described to us as graves of very antient date. The peasants who accompanied us believed them to contain the bedies of banditti, who, according to their account, formerly plundered the merchants in this forest, when the copper-ore used to be carried, upon the backs of horses, from Fahlun to Westerås. As the whole band of robbers was gradually destroyed, so the individuals composing it were severally buried, where they fell, by the side of the public way. This is the tradition which the present inhabitants have concerning these heaps; not to call them barrows, because they have neither the magnitude nor the appearance of an antient Celtic mound. If they may be compared to any tumuli of antiquity, they rather resemble those heaps which the Romans raised by the side of their highways,

passing a

⁽¹⁾ At a quarter of a Swedish mile from Avestad are the brass-works of Bjurforss, which we did not stop to examine.

made upon the spot will serve to give an idea of their appearance, and the manner in which they occur in the route.



We had a new proof of the surprising superiority of the public roads in Sweden, soon after we left Broddebo; a beautiful highway, as fine as the best kept gravel-walks in any nobleman's grounds, having been actually constructed through the waters of a lake. It was about four o'clock, r.m. when we arrived at Sala. The inn was full, but we hired lodgings in an adjoining house, and immediately set out for the famous silver mines, which are distant about an English mile west of the town. At this late hour, a descent into them was described to us as rather hazardous; but our curiosity got the better of our fears, and we reasonably concluded that the want of day-light could be no serious obstacle in a subterraneous excursion. These mines have been, so long worked, that there is no record of the time in which

Salu.

Mine of Sulberg.

which they were first opened. Every thing relating to the CHAP. IV. geological position of the great bed of ore has been most Nature of the accurately and scientifically described by Professor Thomson': Ore. it lies in a vein of primitive limestone, about half a mile in breadth, which occurs between granite and gneiss. In this vein lies the whole of the Sala excavations. The limestone itself is granular, with a shade of green, and possesses a good deal of beauty*. It is the common stone employed at Sala for building the walls of enclosures. The veins containing the silver ore are of galena, or sulphuret of lead, containing other metallic sulphurets, as those of zinc, iron, and copper: they traverse the limestone from north-west to south-east'. The name of a silver-mine has therefore been bestowed upon a lead-mine at Sala, as it often happens where the veins of argentiferous galena are worth working for the silver they contain. The appearance of the richest of the Sala silver ore is not unlike the galena of Alston Moor in Cumberland: it has the same grey aspect, but is more granular; that of Alston Moor having a fibrous structure, when it is amorphous and rich in silver. Few mines are so rich in beautiful and rare minerals. We arrived before it was too late to examine the heaps around it; and were soon convinced that an interesting collection might be formed from the discarded materials

⁽¹⁾ See Trav. in Sweden, p. 233. Lond. 1813.

⁽²⁾ Ibid.

⁽³⁾ Professor Thomson also notices a vein of basalt, as a very remarkable and uncommon object in a primitive country, quite flat, with no remains of floctz trap in the neighbourhood. Ibid. p. 235.

CHAP. IV.

Descent into the Salberg.

materials which lie near to its mouth. Formerly, the quantity of silver found here was much more considerable than it is now. We descended into the mine, which is called Salberg, by means of ladders; but they were in such excellent order, and so strong, that we entertained no apprehension of falling. The descent is easy; but it is very curious, and unlike any other mine we ever visited. exhibited to us a succession of circular caverns, the floor of one constituting also the roof of the other; through which we passed downwards by a series of cylindrical apertures, each of which, like the chimney of the inferior chamber, conducted us into some new grotto of wonder and curiosity. At the depth only of forty fathoms, we arrived at one of the working-places. The ore seemed to be in small quantities; a thin vein, entirely of galena. Sometimes, but very rarely, the miners have met with *native silver*, and then only in very small portions, which have been immediately bought up for more than it was worth, owing to its extreme rarity, a curiosity. Much greater rarities have also been occasionally discovered in the Sala mine; namely, antimonial silver, of which the Assessor shewed us some fine specimens; also native antimony; and the native amalgam of silver and mercury. The native amalgam has not been observed there since the termination of the seventeenth century.

^{(1) &}quot;In the year 1506, the annual produce was 32,266 marks: at present, I am told, the quantity extracted does not exceed 2000." Thomson's Trav. in Sweden, p. 235.

century. At this time they were working the ore from CHAP. IV. cavities of the mine that had been once abandoned; which explains the reason why the veins appeared comparatively insignificant. The original excavations extend much lower,—to the depth of one hundred and fifty fathoms; but owing to an accident which happened here, as at Fahlun, of the falling-in of a considerable part of the works, the lower chambers have been rendered inaccessible. The torches used in all the Swedish mines consist of deal splinters, formed into fagots about as thick as a man's arm. Our guides

- (2) The minerals found in the Salberg mine, near Sala, are enumerated by Engestrom, in his Guide aux Mines, p. 17. Stockholm, 1796. But substances have since his time been discovered there which have rendered this mine remarkable; and among these, in particular, the mineral called, from the place where it was first found, Salite. We shall insert a list of all of them.
 - 1. Native silver.
 - 2. Antimonial silver.
 - 3. Native amalgam.
 - 4. Native antimony, and sulphuret of antimony.
 - 5. Many varieties of sulphuret of lead, crystallized and amorphous.
 - 6. Sulphuret of zinc.
 - 7. Arsenical and common sulphurets of iron.
 - 8 Black granular iron-oxide.
 - 9. Salite.
 - 10. Chlorite, containing garnet; and garnet in galena.
 - 11. Asbestus in all its varieties.
 - 12. Pot-stone.
 - 13. Ophites, and green serpentine.
 - 14. Mica.
 - 15. Many varities of crystallized carbonate of lime.
 - 16. Trap, and basalt.
 - 17. Quartz, and red hornstone.
 - 18. Hornblende; &c.

CHAP. IV.

Minerals.

guides took care to be provided with plenty of these, making a blazing illumination in the different chambers; and having supplied us with their mining implements, we fell to work, and were engaged in digging the ore from its native bed,to the great mirth of the workmen, who were much amused with the waste of labour shewn in our awkward management of their tools. The great heat of the mine is always most oppressive to persons unaccustomed to such places; and of this the miners are themselves by no means insensible: but it was nothing to what we experienced in the Mine of Fahlun. We soon afterwards ascended, and procured a very interesting series of specimens upon the spot. Others were also afterwards brought to our lodgings. We have already inserted a list of them in a note. The Assessor of the mine shewed to us his own magnificent collection; containing not only all the minerals common or peculiar to Sala, but also many valuable specimens from foreign countries. He wished to dispose of the whole, for three hundred rix-dollars; -a trifling sum, compared with the real value.

Town of Sala.

The town of Sala has been described as not inferior to Fahlun in size and elegance. Like all the Swedish towns, it has an open square, from which the streets run, with the utmost regularity, in different directions. To us it appeared both small and dirty; which only shews how different the same place may appear to different travellers at different seasons.

We

We partook of a meal at the table d'hôte of the inn, where CHAPLIV. every thing was uncleanly and of bad quality: yet we had hunger for sauce, and therefore were not disposed to quarrel with our food. An apothecary, with well-meaning but overwhelming civility and volubility, sounded quite an alarum in our cars: he introduced to us an artist who carried about carved-work in ivory, executed with infinite minuteness of detail, and in the worst taste; from which engravings were made for sale, with portraits of the King and Queen. The arts are at a low ebb indeed, when works of this kind are in request: for their encouragement, they require the patronage of a Turkish Pasha, or a Chinese Mandarin.



CHAP. V.

FROM SALA TO UPSALA.

Journey from Sala to Upsala—Appearance of Upsala—Present condition of the University — Afzelius — Thunberg — Botanic Garden—Chemical Schools — Mineralogical Collection—University Library—Typographical rarities — Manuscripts—Codex Argenteus—Cabinet of Queen Christina—Mysterious gift of Gustavus the Third—Executive branch of the University—Degrees—Theses—Cathedral—Burial-place of Linnæus—monument erected by the inhabitants—Image of Thor—Bloody coat of Eric—Shift of Margaret—New Botanic Garden—Lecture Room—Conflicting opinions respecting Gustavus the Third—Habits and manners of the Students—Public Cellars—Conduct of the Students towards the Professors—total want of discipline—neglected state of science—want of emulation—Habits of intoxication—Character of the Swedes—Uniform aspect of the country and its inhabitants.

Journey from Saluto Upiala

In our journey from Sala to Upsala, upon the thirteenth of November, we passed through a cultivated country so much resembling Cambridgeshire, in its level corn land and the appearance of its villages, that we were often reminded of

the approach to our own University, as we drew night to the CHAP V most celebrated of the Swedish Seminaries. We met, as before, in our first stage to Tarnaby, numerous bands of Dalecarlians, returning, from their summer excursions for employment, towards their own country. From Tarnaby we next came to Gastre, distant twenty-one English miles from Sala; and here passed the boundary between the provinces of Wistmanland and Upland. Afterwards we journeyed through Långtora and Safva; the country being open, bleak, and level, with the very best roads. The land on all sides appeared to be in a high state of cultivation, having lost in picturesque beauty what it has gained by man's industry; for of those forests which almost universally cover the Swedish territories, not a vestige, nor even a solitary tree, was to be seen. After another stage of twelve English miles and a quarter, at the distance of fifty-two miles and a half from Sala, we arrived, just as it was growing dark, at Upsala. We had, however, a fine view of the Royal Château, upon an Appearance of eminence, as we entered the town: the Cathedral, also, presents a superb figure, and is visible, upon this road, a considerable distance from Upsala¹. In a former Volume, the

appearance

⁽¹⁾ The resemblance between Upland and Camiridgeshire was noticed in the preceding Chapter: but another triveller, also of the University of Cambridge, affords, in his Manuscript Journ ... a curio s coincidence with the foregoing observations, by saying that there is a resemblance also in the external appearance of the two Universities.

[&]quot;The first appearance of Upsal may be compared to that of the situation and view of Cambridge from the Huntingdon road. The Palace of Upsal stands upon high ground, as does the county gaol at Cambridge. The town being below, you look over the latter,

CHAP. V.

Present con-

dition of the University. appearance of *Upsala*, in the approach to it from *Stockholm*, has been described. When we first arrived in this celebrated seat of northern literature, having our heads filled with extravagant notions of the splendour of a University which had produced so many illustrious men, we reserved for our second visit a diligent inquiry into its history and present state*. The high expectations we had formed, with regard to its flourishing condition, were not however realized. Every thing seemed to dwindle into insignificance, when the reality was opposed to our ideal picture. morning after our arrival (November 14) we waited upon Dr. Afzelius, in his apartments in the Palace. been during ten years engaged in foreign travel; and was at this time unpacking his collection, which consisted of natural curiosities from Africa, and other distant regions which he had visited. We presented to him some specimens of rare plants entrusted to our care and conveyance by Dr. Muller of Christiana. As Dr. Afzelius had been in England, and was in Cambridge but a short time before we set

Afzelius

and see an extent of flat country around. By the original plan of the Palace, it was intended to occupy three sides of a square parallelogram; but one side was never finished At one corner there is a tower: the other side is not completed in the same way. The Governor of the Province resides here, and a few other persons. It is intended for the residence of the Sovereign, when he visits Upsal. This establishment is quite independent of the University." Dr. Fiott Lee's MS. Journal.

out

⁽¹⁾ Part III. Sect. I. p. 171. Lond. 1819.

⁽²⁾ This has been in some measure anticipated, by the very ample account published by Dr. Thomson, in his Travels in Sweden. Lond. 1813.

out upon this expedition, he seemed to be well aware of the CHAP. V. striking contrast which a comparison of the two Universities must necessarily afford; and said to us, "You must not expect to find every thing here upon the same footing as in England: we have neither the same funds, nor the means of exciting an equal degree of emulation among our students."

Having expressed an earnest wish to be present at some of the public lectures, he told us that Professor Thunberg, the Thunberg. successor of Linnaus in the Botanical chair, was at this moment delivering a lecture. We hastened to the spot: and found this venerable man, so well known for the account he has published of his Travels in Japan, in the old Botanic Botanic Garden, opposite the identical house, or cottage, where Linnaus once resided; and in which Professor Thunberg now lived. The lecture was given in the Old Green-house, as it used to be by Linnaus, in the Swedish language; and with such animation of manner, that we much regretted our incapacity to keep pace with the Professor in his harangue. Some of it we understood: it was upon the interesting subject of the "superba Palmarum familia" of Linneus; and immediately brought to our recollection the observations with which he terminates the Prolegomena of his valuable Flora Lapponica'. But what was our surprise, to find the Professor

with

^{(3: &}quot; Calidissimo orbis part s regit superba Palmarum familia; terras catidas incolunt FRUTESCENTES plant rum gentes; australes Europæ plagas numerosa ornat HERBARUM corona; Belgium, Daniamque, Graminum occupant copiæ; Sueciam, Muscorum agmina; ultimam vero frigidissimamque Lapponiam pallidæ ALGÆ, præsertim albi Lichenes. En ultimum vegetationis gradum in terra ultima!"

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with only half-a-dozen slovenly boys, standing around him, as his audience,—the eldest of whom could not be more than fourteen years of age,—whose whole interest in the lecture seemed to consist in watching for the moment when a palm-branch was cast among them by the Professor, for which they scrambled; being eager to cut these branches with their knives, for the purpose of making them serve as walking-staves. After the lecture was over, the boys scampered off with their palm-sticks, and the Professor kindly admitted us to see his cabinet of rarities.

The account of his voyage to Japan was published in 1791, and translated into German. An English edition of the same work has since appeared in our own country.

His cabinet consisted of a large collection of objects of natural history, shells, birds, quadrupeds, insects, plants, The last were not numerous; and they and minerals. were, in some instances, described under false names: for having presented to us a small quantity of what he considered as the granular tin of Japan, we found it, upon examination, to be an oxide of Titanium. Among the insects we noticed a magnificent butterfly, the Atlas of Ceylon, measuring nine inches across its extended wings: also a most beautiful little stag, from the island of Java, not more than twelve inches in height. His collection of plants contained twenty thousand specimens. We saw also specimens of the caméo work of the Chinese, which seem to prove that this curious branch of sculpture has been long known in that country; whence, perhaps, the art of cutting caméos was originally derived by the antient and modern nations of the Western world.

world. The Chinese caméos are executed in alabaster and in CHAP. v. trap, and sometimes exhibit layers of three distinct colours. One in the possession of Professor Thunberg, representing fruit and flowers, executed in trap, was of three colours red, green, and white; and it measured twenty inches by At this time, Professor Thunberg was preparing sixteen. for the press a new edition of his Flora Japonica.

Some of the students who had remained in the Green-house afterwards accompanied us in our examination of the BOTANIC BOTANIC GARDEN. We found a head-gardener employed, with two assistants acting under his direction. The principal gardener obligingly presented to us a specimen of Lopezia racemosa, a very rare plant from Peru, with a delicate and beautiful red flower, belonging to the class Monandria Monogynia, of which so few are known. It is not noticed by Martyn, in his edition of Miller's Dictionary, although mentioned in the Catalogue of Green-house and Stove Plants prefixed to that work. We have since seen it in the Garden at Cambridge. Among the forced plants we were not a little surprised to find the common English yew-tree (Taxus baccata), growing in pots. It is native in one place only in all Sweden, where it appears dwindled to a small shrub. The green-houses were small, but neat, and kept in good order. said that the old garden would soon be destroyed: yet, as a spot sacred to the memory of Linnæus, this ought, surely, to be preserved. In the adjoining buildings there was a small menagerie, where a few live animals were preserved; as an ape, a parroquet, &c.; but there was nothing worth more particular notice.

Afterwards

chap. v. with only half-a-dozen slovenly boys, standing around him, as his audience,—the eldest of whom could not be more than fourteen years of age,—whose whole interest in the lecture seemed to consist in watching for the moment when a palm-branch was cast among them by the Professor, for which they scrambled; being eager to cut these branches with their knives, for the purpose of making them serve as walking-staves. After the lecture was over, the boys scampered off with their palm-sticks, and the Professor kindly admitted us to see his cabinet of rarities.

The account of his voyage to Japan was published in 1791, and translated into German. An English edition of the same work has since appeared in our own country.

His cabinet consisted of a large collection of objects of natural history, shells, birds, quadrupeds, insects, plants, The last were not numerous; and they and minerals. were, in some instances, described under false names: for having presented to us a small quantity of what he considered as the granular tin of Japan, we found it, upon examination, to be an oxide of Titanium. Among the insects we noticed a magnificent butterfly, the Atlas of Ceylon, measuring nine inches across its extended wings: also a most beautiful little stag, from the island of Java, not more than twelve inches in height. His collection of plants contained twenty thousand specimens. We saw also specimens of the caméo work of the Chinese, which seem to prove that this curious branch of sculpture has been long known in that country; whence, perhaps, the art of cutting caméos was originally derived by the antient and modern nations of the Western world.

world. The Chinese cameos are executed in alghaster and in CHAP V trap, and sometimes exhibit layers of three distinct colours. One in the possession of Professor Thunberg, representing fruit and flowers, executed in trap, was of 'three coloursred, green, and white; and it measured twenty inches by At this time, Professor Thunberg was preparing sixteen. for the press a new edition of his Flora Japonica.

Some of the students who had remained in the Green-house afterwards accompanied us in our examination of the BOTANIC Botanic GARDEN. We found a head-gardener employed, with two assistants acting under his direction. The principal gardener obligingly presented to us a specimen of Lopezia racemosa, a very rare plant from Peru, with a delicate and beautiful red flower, belonging to the class Monandria Monogynia, of which so few are known. It is not noticed by Martyn, in his edition of Miller's Dictionary, although mentioned in the Catalogue of Green-house and Stove Plants prefixed to that work. We have since seen it in the Garden at Cambridge. Among the forced plants we were not a little surprised to find the common English yew-tree (Taxus baccata), growing in pots. It is native in one place only in all Sweden, where it appears dwindled to a small shrub. The green-houses were small, but neat, and kept in good order. It was said that the old garden would soon be destroyed: yet, as a spot sacred to the memory of Linnæus, this ought, surely, to be preserved. In the adjoining buildings there was a small menagerie, where a few live animals were preserved; as an ape, a parroquet, &c.; but there was nothing worth more particular notice.

Afterwards

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Afterwards we saw the Chemical Schools in the house

CHAP. V. Chemical Schools.

of Professor John Afzelius, brother of Adam Afzelius the botanist, whom we had before visited. He was delivering a lecture, at the time of our arrival, to about twenty or thirty students; but in a voice so low and inaudible, as to be scarcely intelligible, even to those who were his constant hearers. We observed a few among them making notes; but the chief part of the audience seemed to be very inattentive, and to be sitting rather as a matter of form than for any purpose of instruction. Their slovenly dress, and manner, were moreover so unlike that of the students in our English Universities, that it was impossible to consider them as gentlemen: they had rather the air and appearance of so many labouring artificers, and might have been mistaken for a company of workmen in a manufactory. Around this chemical lecture-room was Mineralogical arranged the Professor's collection of minerals,—perhaps more worthy of notice than any thing else in Upsala; for the Chemical Laboratory scarcely merits attention. classed according to the methodical distribution of Cronstedt, and has been in the possession of the University ever since the middle of the eighteenth century. The celebrated Bergmann added considerably to this collection, which may be considered as one of the most complete in Europe; especially in specimens from the Swedish mines, which have long produced the most remarkable minerals in the world. One cabinet alone contained three thousand specimens; and

> the whole series occupied no less a number than forty. is true, that, in this immense collection, there were many things denoting an earlier period in the history of mineralogy,

Collection.

than of mineralogy. One small cabinet contained models of mining apparatus; pumps, furnaces, &c. There is no country that has afforded better proofs of the importance of mineralogical studies to the welfare of a nation, than Sweden; but the Swedes have not maintained the preeminence in mineralogy which they so honourably acquired. The mineralogy of Cronstedt laid the true foundation of the science, by making the chemical composition of minerals the foundation of the species into which they are divided: and whenever an undue regard for the mere external characters of these bodies causes an attention to their chemical constituents to be disregarded, it may be regretted, as an effectual bar to the progress of mineralogical knowledge.

We next visited the University Library.—In ascending to it, we saw the Auditory, as it is called, where the Academical disputations are held, and public lectures read; having very much the appearance of one of our English Town-Halls. This place is immediately under the Public Library. The President sits at the farther end of the apartment, immediately behind the Respondent. Upon a bench below the Respondent are placed the two Opponents, and behind them are several rows of seats for the spectators. Voluntary opponents frequently rise among the spectators, who discuss arguments with the Respondents.

The

⁽¹⁾ Thomson's Trav. in Sweden, p. 173. Lond. 1813.

⁽²⁾ Ibid.

CHAP. v. The degrees, or, as they are here called, promotions, are conferred once in three years. Neither the Professors nor the Students have any distinction of dress; except upon these occasions, when the Professors wear a cloak, and coloured stockings: yet, surely, if ever in any country the dignity of its Academical institutions require a peculiarity of habit, to distinguish its members from the lower orders of the inhabitants, it is more particularly necessary in Upsala. Cambridge and Oxford, if the students appear in the streets without their Academical dress, it is generally those only of the petit-maîtres among the undergraduates who are tempted to commit this breach of University discipline, by a desire to imitate the habits of the young men of fashion in the metropolis; but their appearance is never such as to cause them to be confounded with the poorer class of artificers: whereas in Upsala, a student in the streets is not a whit better clad than any working coachmaker or carpenter in England.

University Library.

We ascended to the University Library. It contains fifty thousand volumes; which are kept in very excellent order, and in a handsome room. The Librarian, Peter Fabius Aurivillius, Professor of Humanity, to whom we delivered

our

⁽¹⁾ Dr. Fiott Lee, in his MS. Journal, states the number of volumes at 65,000. The persons who accompany strangers in their visits to public libraries are not likely to be very accurate in the accounts which they give in round numbers. The number of the volumes in the University Library of Cambridge has never been ascertained; but Dr. Farmer, Master of Emmanuel College, when Librarian, counted the number of authors, and they amounted to 100,000. This number has since been greatly augmented; and there are, besides, sixteen other Libraries in Cambridge belonging to the different Colleges. This comparative statement will serve to mark the striking difference between the two establishments.

our letters of introduction, told us that he had published a CHAP. V. complete catalogue of the whole collection, arranged alphabetically, according to the names of the different authors. The alphabetical form is perhaps the most convenient which any catalogue can have, for the use of persons frequenting a public library; provided only that it be made sufficiently comprehensive, and be extended not only to the names of the authors, but also to the subjects and titles of their several works. In viewing this collection, we endeavoured to ascertain to what particular branch of knowledge it was most indebted. The Professor, to whom we applied for information, told us that it was impossible to determine this point; affirming that the library was well provided in all branches of learning. We found here Mr. Turner employed as the amanuensis2, who formerly had the care of Sir Joseph Banks's Herbarium. The library is divided into three distinct parts: the first contains volumes of polite literature, history, and natural history; the second, a collection of various authors presented by Gustavus the Third, when he was Prince Royal: the third consists entirely of volumes of law, physic, and divinity. This library owes its origin to Gustavus Adolphus, or, as he is always called familiarly by the Swedes, Gustaf-Adolph. Like Buonaparte, it was customary with that monarch to reserve, for his share of the plunder, all the books which were found in places captured

⁽²⁾ The same gentleman is mentioned by Dr. Thomson, in his account of Upsala, as being the Librarian at the time of his visit; the name being written Torner, after the Swedish manner.—See Trav. in Sweden, p. 174. Lond. 1813.

CHAP. V.

captured by his troops: and he afterwards presented them to this University. Several of his successors have, by similar donations, imitated his munificent example.

Typographical Rarities. Here is preserved the first book printed in Sweden; namely, Dialogus Creaturarum moralisatus. It bears the date 'Stockholm, MCCCLXXXIII.' We saw also the only copy known of the Manuale Ecclesiæ Linkopensis, printed at Sæuderkæuping, in 1525. The first work printed at Upsala was a Latin Commentary upon the Psalms, of which there is a copy, dated 1515. The other rare typographical curiosities are, a work of Thomas Aquinas, printed in folio, at Mayence, in 1467; two editions of the Catholicon of the fifteenth century, without date; and a Latin Bible, in folio, printed at Nuremberg in 1475. Also, the folio Roman editions of Pliny and Suetonius; the first, of 1473; the second, of 1470.

Manuscripts.

Among the Manuscripts, which are very numerous, and kept in a room below the Library, there are several of great value; such as, the Diarium Wadstenense, upon vellum, in small quarto, written by various hands, from the year 1344 to 1544;—an Icelandic copy of the Edda and Scalda, upon vellum;—and the Icelandic Laws, written upon vellum; a manuscript of great antiquity. But all these are eclipsed, in splendour and value, by the well-known and beautiful Codex Argenteus of the Four Gospels; considered, and with reason, by all comers, as the most worthy notice of any thing in the whole collection. We had the satisfaction of carefully inspecting this precious manuscript, if manuscript it may be called. The characters seem rather painted than written; every letter being executed in silver, with the exception of

Codex Argen-

some of the initial letters, which are of gold: so that every page of the manuscript exhibits one continued illumination. A brief extract from this manuscript will serve to gratify mere curiosity, by affording a fac-simile of the characters. It corresponds with our version of the eighteenth chapter of St. Luke's Gospel, at the seventeenth verse: "VERILY I SAY UNTO YOU, WHOSOEVER SHALL NOT RECEIVE THE KINGDOM OF GOD AS A LITTLE CHILD, SHALL IN NO WISE ENTER THEREIN." In the Codex Argenteus, the well-known old Saxon or Gothic word BARN is used to signify the original raidion. passage occurs thus:

AMEN UIVA İZVIS. SAEI ANANIMIŲ WINAANTARAÇA TRYS SVE BARN, NI UMIU

The history of this manuscript has been given by so many authors, and set forth with so much perspicuity by Mr. Coxe', that we shall no further enter upon it, than by briefly stating, according to the information we received from the Librarian, that it was completed about the end of the fourth century, by a Bishop of Thrace, in the Gothic language used at that time in

⁽¹⁾ See Travels into Poland, Russia, Sweden, and Denmark, vol. IV. p. 151, &c. Mr. Coxe refers to the following works (ibid. p. 157, Note) for the history of this manuscript. "The several editions of the Codex Argenteus, by Junius, Stiernhelm, and Lye. Hickes Gramm. Mæso-Gothica, in his Thesaurus Ling. Sept. La Croze Diss. Philol. at the end of Chamberlayne's Orat. Dom. p. 136. Wetstein's Proleg. in Nov. Test. sect. 68 to 71. Bib. Up. Hist. p. 116 to 123. Le Long. Bib. Sac. vol. II. p. 140, & 538."

CHAP. v. in Mæsia. In the year 1648, when the city of Prague was stormed by the Swedes, it was found among the literary spoils, by a Swedish Count', who sent it as a present to his Queen, Christina. Three editions are extant of this valuable Code, of which the best is from the Clarendon Press of Oxford, by Edward Lye, printed in 1750. It contains a Latin Version, and a Commentary upon the Text, by the learned Benzelius; together with Lye's own observations, and a Gothic Grammar.

> The leaves of the Codex Argenteus are of vellum, but prepared in a very particular manner, and of a violet hue: the cover and back of the volume are of silver, embossed. It is related, that the celebrated Isaac Vossius stole this manuscript, during the confusion which preceded Queen Christina's abdication of the throne of Sweden: and that after his death it was purchased for 250l. by Count Magnus Gabriel de la Gardie, who presented it to the University of Upsala.

> There are in this collection but few manuscripts of the Classics; and even these were evidently written after the invention of printing; they are, however, estimable, owing to the uncommon beauty of the calligraphy, which, in some instances, can with difficulty be distinguished from printing. We saw a good manuscript copy of Horace: and one of Ovid's Metamorphoses, less perfect and less legible. All the volumes are inclosed in cases faced with Instead of written certificates, as vouchers for the books borrowed by the members of the University, they make use of printed tickets.

The principal curiosity in this library has been mentioned CHAP. v. by other authors, and sometimes inaccurately described. It is Cabinet of a cabinet of the most curious and costly workmanship, adorned Christina. with paintings, mosaic, and gems, which was presented by the merchants of Hamburgh to Queen Christina. One of the doors is composed entirely of a single stone, said to be an agate; but, in fact, a slab of that species of stalactite carbonate of lime, which is vulgarly called "flowered alabaster." The natural veins, or zones, of this mineral, beautifully polished, have been ingeniously appropriated by a painter, so as to constitute parts of the picture which he has represented upon the stone. Upon one side is seen the destruction of Pharaoh and his Host in the Red Sea; and few persons would imagine that in a work of this kind, which must necessarily have so much of trick in it, the artist could have displayed the sublimity he has really afforded. The figure of Moses, and the expression delineated in his countenance, are worthy of as great a master as Raphael. An Equestrian Soldier is also figured with great spirit and energy. In this curious piece, the perspective, as it might be expected, is altogether violated. Upon the other side of the slab is a representation of the Day of Judgment; but this has been evidently borrowed from the famous picture by Michael Angelo, in the Sestina Chapel at Rome. It contains some of the same figures; and has, moreover, the same characteristic portraits; such, for example, as those of the Cardinal, and the Mistress of the painter. The artist, whose name we did not learn, has represented his own portrait among those of the blessed in heaven, VOL. VI. вв

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heaven, and has decorated his head with the Pope's tiara. Other parts of this cabinet are adorned with antique gems, paintings on precious stones, Florence mosaïc-work, executed by inlaid pieces of antique marbles, and very curious painting by means of inlaid pieces of wood in mosaïc, perhaps the workmanship of Albert Durer, and certainly of his time.

M vsterious gift of Gusta-

But the most singular deposit in this room is a donation of rus the Third. Gustavus the Third: it consists of two chests of manuscripts, double-locked, chained, and sealed, which are not to be opened until fifty years shall have elapsed from the time of his death. These chests are supposed to contain his foreign correspondence, many papers relating to the principal transactions in which he was engaged and the state of Europe at the time of his reign. An English traveller will hardly participate the feelings of curiosity which are betrayed by the Swedes respecting these mysterious boxes. "What a misfortune for us," said one of the inhabitants of Upsala, "that this precious deposit will not be opened in our time." Great expectation is on foot with regard to the things that will come to light when these papers are examined; but, for our own part, we could not help thinking that the moral of the old fable "Parturiunt montes" &c. will be found very applicable to the event of the opening of these chests, when the time arrives for their inspection.

The number of the students in this University has sometimes exceeded one thousand: at the present time there were not above three hundred'. The whole population, including

⁽¹⁾ When Dr. Fiott Lee afterwards visited this University, the number was greatly increased. According to a note in his MS. Journal, there were about 800 students at that time.

including the students and other inhabitants of Upsala and CHAP. v. its neighbourhood, did not amount to four thousand persons. The University consists of a Chancellor, a Sub-Chancellor, Executive branch of the who is always the Archbishop of Upsala, and a President. who is called Rector Magnificus, answering to the office of Vice-Chancellor in our English Universities. There are also Professors of Divinity, Law, Physic, and Philosophy, besides extraordinary adjuncts, as assistants, to each of these Protessorships, Magistri Docentes in the several faculties, and Teachers of Modern Languages and the Polite Arts. principal studies of the place are divided into the four classes above mentioned. The lectures are both public and private, the former being delivered gratis. The annual salaries of the Professors do not exceed 100l. When a Professor has continued in office for thirty years, he is allowed to retire with the title of *Emeritus*, and enjoys his salary for life. Students are sent to Upsala about the age of sixteen, or even earlier: they lodge in private houses in the town, there being no Colleges; and they are divided into classes, according to the Provinces to which they belong. Lectures begin, as with us, in October; and continue for about eight months. The degrees Degrees. conferred, are those of Philosophiæ Candidatus, or Bachelor of Arts; Philosophiae Magister, or Master of Arts; and in Divinity, Law, and Physic, the different gradations are styled Candidatus, Licenciatus, Doctor. Before receiving any degree,

University.

⁽¹⁾ This fact is stated by Mr. Coxe, from whom it is here borrowed. See Travels, vol. IV. p. 145. Lond. 1787.

⁽²⁾ See Coxe's Travels, ib.

Theses.

degree, a student must undergo several examinations from various Professors, and must compose a Latin Thesis, which he is bound to defend in the Schools. Similar exercises are also necessary previous to taking the second degree; and as the different Theses are printed, we were at considerable pains to collect all that could be obtained, thinking they would serve to give a good idea of the state of science in this seminary. We pursued, afterwards, the same plan with regard to the University of Abo; and a list of the subjects upon which the principal dissertations were written, will be found in the Appendix. Considering the manner in which the lectures are given, the sort of people which attend as students, and the total want of all Academical discipline and all incitement to emulation in Upsala, it is quite wonderful that it has produced such a number of persons eminent in every branch of science.

Cathedral.

Soon after seeing the Library, we visited the CATHEDRAL, which is hard by; the finest ecclesiastical structure in all Sweden. The spire of the Cathedral of Wästerås is said to be loftier, but in other respects there can be no comparison between

⁽¹⁾ The Amoenitates Academic v published in 1749, in 8vo. under the auspices of Linnœus, contained a collection of these Theses, but not in their original state: they were selected and revised by that great man, and have therefore been regarded as of equal authority with his own writings. The collection alluded to in the Appendix, was formed with a view to shew simply what the subjects were of the Theses at Upsala and Åbo, as they were severally printed in their original form in those Universities during nearly half a century. This collection, presented by the author of these Travels, is now in the University Library at Cambridge, in four volumes quarto.

^{(2) &}quot;Cathedrale ornat templum, inter omnia Suecorum pulcherrimum." Deliciæ Regn. Sueciæ, tom. I. p. 380. L. Bat. 1706.

between the two edifices. This of Upsala is a brick building, CHAP. V. in excellent order; having been lately repaired, at a great expense. The architecture of the interior is purely Gothic; but the outside of the building exhibits a strange mixture, with pillars of the Doric order, in consequence of work done in a later age, when additions were made to the original structure; the cathedral having often suffered from fire, and as often been repaired. It is said to have been begun in the middle of the thirteenth century, under the direction of Stephen Bonneville, a French architect, who folle were in its construction the model of the Church of Notre Dame, at Paris'; but this date does not agree with the chronology of the accurate Messenius, who, in his "Epitome Scondiæ illustratæ," assigns the year 1164 for the commencement of the cathedral4, which was not completed for above two hundred years afterwards, when its dedication took place with extraordinary pomp and solemnity'. As we entered this building, we were much struck by its elegance and neatness. The altar alone exhibited a barbarous style of ornament, being laden with heavy colossal figures, executed in the worst taste, and already hastening fast to destruction.

Αt

⁽³⁾ See Coxe's Travels, vol. IV. p 131. Lond. 1786.

^{(4) &}quot;Carolus rex ibi prima basilicæ jacit fundamenta ex marmore, et post annos cc. fuit opus consummatum." Messen. S. ond. Illust. tom. XV. p. 27. Stockholm, 1705.

⁽⁵⁾ This happened in the year 1435, (ilid. p. 74.) and the event is recorded in the third volume of the same work. "Archimysta etiam Sueoniæ Olaus, consummatam tandem Upsalensium basilicam, Thomâ, Stregnensi episcopo, collegâ adhibito, insigni admodum festivitate, Deo Optimo, Maximo, Divisque, Lausentio, Olao, ac Erico, inauguraverat, dedicaveratque." Chronol. Scond. tom. III. p. 59. Stockholm, 1700.

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At the western extremity is a magnificent organ, the largest Near the altar, inclosed in iron net-work, is the in Sweden. silver coffin containing the reliques of Saint Eric; not of Eric the Fourteenth, the eldest son of Gustavus Vasa, as has been erroneously supposed, but of Eric the Seventh, son of Jedvardus, who being captured in battle by the Danes, was beheaded, and afterwards canonized for his virtues. His remains were originally interred in Old Upsala, but afterwards transferred to this cathedral. Eric the Seventh cuts a brilliant figure in the early annals of Sweden: it was this monarch who conquered Finland, and first established Christianity among the inhabitants of that country. formed a regular Code of the Swedish Laws, which bore his name; and he excluded from the benefit of those laws all persons who adhered to their antient heathen superstitions.

In

⁽¹⁾ He was taken in battle in the field of Upsala, after contending with the greatest bravery against his rebellious subjects, who were aided by the Danes. (Scondiæ Illustratæ, tom. 11. p. 5. Stockholm, 1700.) The Swedes celebrate the Eighteenth of May as the day of his martyrdom. (Ilid.) His reliques were removed to New Upsala in the year 1273. (Ilid. tom. XII. p. 126.) This monarch is spoken of in terms of high eulogy in the Swedish annals. " Commodis patriæ sedulus invigilat; non paucas fundat ecclesias; ipsas proventibus ornat; Rempublicam quoque insigniter ordinat; aquissimas condit leges; impias alrogat; perversus Sueonum consuetudinis radicitus evellit; inde flagitiosos, sine respectu personarum, animadvertit." (Ibid. tom. II. p. 5.) His virtues and severe discipline were not however suited to the views and temper of the Nobles under him, who had been accustomed to live by plunder and piracy; consequently they conspired against his life, and were joined, in a revolt, by the Danes. There is nothing worth seeing at Old Upsala, or Gamla Upsala, now a village, distant above five English miles from the modern city, if we except the three tumuli, said to be the Sepulchres of Odin, Frigga, and Thor, which are near the village church. Dr. Fiott Lee visited Gumla Upsala in 1807, and made a drawing of those tumuli, whence the Vignette to this Chapter is taken. Dr. Lee compares them, in size and appearance, to the Mounds near Bartlow in Essex.

In a small chapel behind the altar is an oblong monument, the CHAP. v. tomb of the famous Gustavus Vasa. His effigy is represented in marble, between those of his two first wives, whose remains are interred in the same sepulchre. This interesting monument has sustained considerable injury, owing to a fire, which also did great damage to the cathedral.

There are many other tombs which deserve notice, from their relationship to the Swedish history2: but all our attention was taken up, and wholly engrossed, by one; namely, the tomb, or rather grave, of Linnaus. A simple entablature of Burnal-place stone, let into the pavement at the western extremity of the cathedral, near the door, and under the organ gallery, now covers the mouldering reliques of this illustrious man. With what emotions of sacred enthusiasm will future generations approach the hallowed spot which has afforded a sepulchre to his remains!-He, who was every thing that could be required, to give to the studies of Natural History, in the great scale of Science, their dignity and value³! How powerful, in its effect upon the heart, will ever be the simple inscription which marks the place where he lies!

OSSA CAROLI · A · LINNE

Who

⁽²⁾ For an account of which the Reader may be referred to the valuable information contained in the Travels of Mr. Core; an author who has made History, as it were, his home; and who is never so much at home as when he is among the tombs of illustrious persons .- See Travels into Poland, Russia, and Sweden, vol. IV. p. 132, &c. Lond. 1787.

^{(3) &}quot;He was early led to regret that NATURAL HISTORY had not, by public institution, been more cultivated in Universities; in many of which, logical disputations and metaphysical theorizing had too long prevailed, to the exclusion of more useful science."-See Pulteney's Linnæus, by Maton, p. 496. Lond. 1805.

CHAP. v. Who will read these words unmoved; or wish to read more! for of the title that has been added, every letter is superfluous'. "HIS NAME," as said his biographer, "CAN NEVER DIE. WILL BE CHERISHED IN THE MEMORY OF EVERY LOVER OF NATURE, AND REMAIN ON THE FAIR RECORDS OF SCIENCE, TO THE END OF TIME." Indeed time alone is wanted, to shew the extent of his researches, and the depth of his knowledge. He seems to have anticipated whole ages of investigation': and in the goodness of his heart, and the tendency of all his writings and discourses to give glory to the great Author of the works of Nature, there was something not only to admire, but to venerate'. In a small chapel near the place of his interment, the students and other inhabitants of Upsala have erected a plain but beautiful monument to his memory.

Monument erected by the inhabitants.

(1) This is the whole of the Inscription:

OSSA CAROLI · A · LINNE EQV · AVR.

MARITO · OPTIMO FILIO · VNICO CAROLO · A · LINNE' PATRIS . SVCCESSORI EΤ SIBI

SARA · ELISABETA · MORÆA

- (2) See Pulteney's Linnaus, by Maton, p. 506. Lond. 1805.
- (3) Witness the extraordinary remark in his Diary, "that he had never seen rudera diluvii universalis, but successiva temporis." The most experienced geologist of the present day will know how to appretiate the value of this observation.
- (4) "The habit of scrutinizing and contemplating the wonderful energies and economy of Nature, had the effect of inspiring Linnæus with an unsophisticated sort of pious feeling, which breaks forth, in various parts of his writings, with a peculiar and most engaging eloquence."—See Pulteney's Linnaus, by Maton, p. 497.

memory. It is executed in the fine porphyry of Elfsdal; CHAP. V. the letters of the inscription being of bronze, gilded, and placed in full relief upon the stone. As far as the workmanship is concerned, nothing can surpass the effect. An objection may be made against the inscription itself, which has very generally been censured, on account of the words Botanicorum Principi: but it should be observed, that this title, and the very words of it, were those which Linnæus had chosen to appropriate to himself': and although the inscription would have been much better without any such addition, yet this fact may always be urged in its justification. In its present state, this inscription appears as follows:

CAROLO · A · LINNE' BOTANICORUM PRINCIPI

AMICI · ET · DISCIPVLI MDCCLXXXXVIII.

The expense of this monument, plain and simple as it seems, amounted to two thousand rix-dollars; of which sum, four hundred were expended in supplying the bronze characters of the inscription. On the south side of the same aisle there is a Monument to the memory of Menander archbishop of Upsala, erected by his son. This monument was executed in Italy; and it is adorned with sculptured figures in marble. A piece of sculptured alabaster also represents the prelate, leaning

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^{(5) &}quot;He was styled, by all Botanists, PRINCEPS BOTANICORUM." See Linnæus's Diary, p. 566. Pulteney's Linn. by Maton. Lond. 1805.

CHAP. V. leaning upon his Biblia Fennica, receiving the homage of a Groupe of Figures, whom we supposed to represent the Muses, from the circumstance of their being preceded by a winged Apollo.

Image of Thor .

Among the reliques preserved here, there are some so exceedingly curious, that we cannot omit the mention of them, although they have been noticed by many other travellers. Foremost in the list of these, is the wooden image of the God Thor, who may justly be styled "the loggerhead idol of the Northern nations." It is much such a representation of the human head in a log of wood, as Scheffer, in his work "De Diis Lapponum Paganicis," has figured, with a worshipper before it in the act of adoration'. According to Scheffer, the image of Thor was always of wood, and of this rude workmanship: it was an idol made out of a birch-tree, the head out of the root, and the body out of the trunk². This is connected with the old worship of fire; and, as a proof of it, the votaries of Thor used to drive an iron nail, with a small piece of flint, into the idol's head3. The image was perhaps borrowed from the upright center log, around which, as at the present day in the Northern forests, fuel was heaped, whenever a fire was kindled by the natives. All these antient superstitions, as they refer to the customs of mankind in its rudest state, so they may

⁽¹⁾ Joann's Schefferi Lapponia, p. 105. Francof. 1673.

^{(2) &}quot;Hæc idola faciunt ex betula, et ex radice quidem caput, ex trunco seu caudice partem reliquam." Ibid.

^{(3) &}quot;In capite infigunt clavum ferreum, cum silicis particula, ut si videatur, ignem Thor excutiat." Ibid.

may be still found, in their prototypes, among the simple CHAP. V. observances, habits, and manners, of a savage people. Yule Clog still retains a degree of reverence in the northern parts of England; the origin of which may have been of the same nature with that in which the Swedish idol was held by its worshippers. The log itself, as a symbol of the fire for which it was used, became an object of worship'. Whatever opinion may prevail upon this subject, we shall find that a similar superstition respecting the same sort of idol has prevailed almost all over the world. Among the antient idols of Greece, the Palladium was of this description; for it was nothing more than a piece of wood of an extraordinary form'. We considered, therefore, this image of Thor as one of the most curious antiquities that any country has preserved; as connected not only with the early history of Sweden, but with the most antient mythology in the world6; and as being worthy of a much more careful keeping than it seems to have here met with, where, from the disregard shewn to its preservation, it is not likely to remain for any considerable length of time. Another curiosity shewn here is more in unison with the taste of a people who preserve among their reliques many a sanguinary testimony of the deeds of murder committed

⁽⁴⁾ See Brand's Popular Antiquities, pp. 155, 157. Newcastle upon Tyne, 1777. Also Brady's Clavis Calendaria, vol. I. p. 124. Lond. 1812.

⁽⁵⁾ See the observations of Heyné, in his Excursus, upon the Palladium and the Penates.

⁽⁶⁾ According to Mr. Core, a correct delineation of this image occurs in the Monumenta Ullarekarensia of Perinskiold.

CHAP. V.

Bloody Coat of Eric.

committed in this country; namely, the coat worn by Eric the son of Steno Sture, his shirt, silk breeches, and purse, when he was stabbed by Eric the Fourteenth; the place where the wound was inflicted being visible, owing to the marks of blood which flowed from the unfortunate victim'. also shewn a more singular standard than perhaps was ever used in any country to excite the valour of its troops: nor do the Swedes, in battle, stand in need of any artificial trophies to call their bravery into action; being, by nature, warlike. It is nothing more than a dirty rag, fixed to a staff, like a banner; and called Margaret's Shift, or Shirt. The history of it does not seem to be very well known: all that we could gather respecting it, has been stated by our own countryman, Mr. Coxe; who says of it, that it was found by the Swedes at Nuremberg, when they captured the place; and afterwards by them deposited here, in honour of the Semiramis of the North². Lastly, we were shewn the magnificent robes worn by the Archbishop and other Clergy upon great festivals: they are principally of velvet, embroidered with gold. This collection is kept in a sacristy, up a small

Shift of Margaret.

⁽¹⁾ See Core's Travels, vol. IV. p. 137. Lond. 1786. for the description of the monument of the illustrious family of the Stures, and for the interesting inscription upon their tomb, which is in a small chapel of this Cathedral.

⁽²⁾ Ibid. p. 141.—" How this shift," observes the same author, "was first procured by the inhabitants of Nuremberg, why it was there considered as a relic, and the exact period when it was imported into Sweden, I must leave to be ascertained by those who are disposed to trace its history and adventures. I did not learn, however, that it has ever had the honour of giving a name to any particular colour, like the shift of Isabella, Queen of Castile."

small flight of stone steps, near the Gothic window of the CHAP. v. cathedral: the reliques are preserved in a chamber closed by double doors of massive iron, with ponderous rusty locks.

After seeing the Cathedral, we went to the NEW BOTANIC New Botanic GARDEN and Green-houses; in which latter are apartments for Professor Afzelius, the Demonstrator of Botany, as he is here called, and also for Professor Thunberg. To this place all the collection formed by Professor Thunberg, in his extensive travels, was at this time about to be removed; the Professor having presented it to the University, for public use. The plan was, to place the whole in one oblong room of very considerable grandeur, but certainly not sufficiently capacious to exhibit it to advantage. The Museum ought to have been of the same dimensions as the Green-house, which runs parallel to it, and will perhaps be the first Conservatory of the kind in Europe. They were already beginning to move the plants into this Green-house, from the Old Botanic Garden. In the front of the building is the new Lecture Room, with a magnificent dome and a sky-light. Immediately under this dome is placed the Professor's Chair; and behind the Cathedral is a bust of Linnæus, to whose memory both this building and also the New Botanic Garden may be considered as As to the garden itself, when considered with reference to a University that has done so much for the science of Botany, it can hardly be deemed worthy of Upsala. It consists of six Swedish acres of ground, lying beneath the windows of the Palace, and on its western side. contains nothing remarkable; and the wretched taste which has been shewn in laying it out may be conceived, when it is mentioned.

cut into more artificial and formal shapes than ever characterized a Dutchman's garden, lead from the entrance to the Green-house.



Setting aside the ugly formality of this appearance, there is another reason for desiring the removal of such an avenue, in the injury done to the garden. The roots of so many fir-trees, occupying a considerable portion of the ground, must have a pernicious tendency in obstructing the growth of plants: and surely in Sweden, which is one vast region of firs, from Scania to Lapmark, an addition of this kind was not required for the Botanic garden of its principal University. The whole of this new establishment, including the Green-house, Museum, Lecture-Room, Garden, &c. may be considered as one of the splendid monuments of the reign of Gustavus the Third, to whom it is entirely due; and of whom, in the present conflicting state of party and opinion in Sweden, it is almost impossible to speak with truth and accuracy. According to one set of men, his memory should be held as deservedly glorious. When his conduct in public affairs is censured, as having proved ruinous to the Swedish finances, "let the works he left

Lecture-room.

Conflicting opinions respecting Gustavus the Third.

⁽¹⁾ Which is nevertheless a relique of Roman taste, as appears from a passage of Pliny's Letters before cited. See Part III. Sect. I. p. 47. Note (2.) Lond. 1819.

left behind him," say they, "at least be properly estimated, CHAP. V. to prove that his lavish expenditure of the public money was always intended for the public good, and never idly nor vainly squandered." The same set of men affirm that Gustavus the Third was not calculated for the Swedes; that his polished manners and enlightened mind were too refined for them; that not a single work exists in Sweden calculated to promote public honours, to give encouragement to the arts and sciences, to improve the manufactures, or to afford patronage to learning, but it may be referred to his reign. Equally endowed, they add, by every qualification that is requisite to form the character of a profound statesman and a great king, posterity will recall with gratitude the memory of this distinguished monarch, will drop a tear in viewing the splendid monuments of his taste and patriotism, and will shudder in the recollection of his fate: and when the prejudices of party, the interests of selfish politicians, and the suggestions of private resentment, shall be done away, future generations will read his history, and place him with Augustus and Hadrian. Having heard this eulogium, as it is frequently pronounced in Sweden, the whole of it will be contradicted by an opposite statement, made by persons who spare no pains to execrate the very name of Gustavus the Third; and who, vilifying his character by the most odious of calumnies, speak of him only as an object of detestation. The time is not yet arrived when History will place him in his true light. In the mean time, to counteract in some degree the injurious designs of his adversaries, it may be added, from the representation made by those who resided with him while he was in France, and

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CHAP. V. were intimately acquainted with the man, that nothing can be more unjust than the aspersions cast upon his private character'.

> Having thus described whatever is worthy the notice of a traveller visiting the public buildings of this University, a few words may now be added upon the manners of the inhabitants. When an Englishman speaks of the Universities of Sweden, or when he is reading the different accounts that have been published of Upsala, it is not often that any right notions are entertained, either of the Seminary that bears this name, or of the habits and tact of the Students and Professors. If, for example, he forms his notion of a Swedish University from any thing he has seen of similar establishments in his

Habits and manners of the Students.

own country, associating ideas of Cambridge and Oxford with his imaginary conceptions of Upsala, Lund, and Abo, he will be egregiously in error. It is not easy to conceive any thing more foreign to all our notions of the dignity and splendour of a national seminary for education, than in the real state of things in Upsala. Perhaps there may be something to compare with it in the Universities of Scotland; but even in the last there is nothing so low as in Sweden. the Reader figure to himself a few dirty-looking lackeys out of place, lounging about in slouched white hats, with a loose surtout thrown over their shoulders, one arm of which hangs empty and dangling by their side, and long military boots rising

⁽¹⁾ In this number was the late Professor Pallas, and other distinguished men of letters, with whom Gustavus associated.

⁽²⁾ See the Plate annexed.



rising above the knees; their hair uncut, uncombed, and CHAP. V. undressed, hanging as long in front as in the rear, but parted over the middle of the forehead, so as to fall in long unsightly tresses about the eyes, cheeks, and ears; giving to the whole figure an appearance not unlike the effigies which the rabble in England dress up to represent Guy Fawkes upon a Fifth of November. This description of their costume is no exaggeration; it is peculiar to all of them, of whatever rank or situation in the University, boys or men; but by much the greater part are boys. Then for their lodgings; for, as it was before stated, there is no such building as a College for the accommodation of any of them: they all dwell in hired lodgings, in the private houses of the tradesmen and other inhabitants:—entering one of these lodgings, and comparing them with the justly reprehensible luxury and extravagance visible in the room of a student in our English Universities, the contrast is great indeed!—a single gloomy chamber, with a bench or couch, by way of bed, in one corner; a stove, and perhaps two chairs; the naked walls hung with wretched prints or dingy-looking maps; and tobacco-pipes, and other lumber, littering about the chamber. We found here one of the identical party by whom we were formerly assailed in our journey from Umeå to Malmagen, in the Norwegian Alps; and whom we have mentioned in a former Volume', as a student of Upsala, who presented to us some Runic Calendars. It is his portrait whom we have represented 1

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⁽¹⁾ See Part III. Sect. I. p. 552. Lond. 1819.

CHAP. v. represented as coming from the Lecture-room, with his book in his hand. By his means we obtained an introduction to many of his fellow-students, and became acquainted with the internal policy of the place. Every one studies what, and when, he pleases: of course, very little real application to learning takes place among them. Soon after mid-day, they resort in numbers, "à la cave," as it is termed; that is to say, to a public cellar for drinking, of which there are two or three in Upsala, precisely answering to the tap-rooms in English alehouses. Here they smoke tobacco, and drink beer, or brandy, or wine. The beer is a composition manufactured at Stockholm, and very bad: although perhaps less unwholesome than the deleterious mixture now sold under the name of beer in England; which, by its baneful effects, has actually altered the character of the lower orders, and substituted a morbid and gloomy irascibility for jovial hilarity; so that a merry drunkard is hardly ever seen. The wine, though called French wine, is also from the breweries of Stockholm; and the brandy is of the worst quality. Swedish brandy, in whatever part of the country it is found, is everywhere alike; a weak spirit, flavoured with aniseed, and, when diluted with water, causing a precipitation, as if milk had been added to the mixture. In these cellars they remain, not only the whole of the rest of the day, but until long after midnight, and sometimes all night. Their revels too, or rather brawls, are not unfrequently attended by blows:

Public Cellars.

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blows; their disputes, especially when they are of a political CHAP. v. nature, ending often in pugilistic combats.

We visited one of these cellars; and found about twenty of the students enveloped by thick fumes of tobacco-smoke: some of whom were sleeping upon chairs, and others lolling upon a bench. Our friend, who introduced us, announced that we were from the University of Cambridge: upon which the greater part did.us the honour to rise; forming a circle round us, and asking several questions relative to our journey, and motives for visiting Sweden. . These we were preparing to answer; when a votary of Bacchus, giving us a hearty slap between our shoulders, reminded us, that, as strangers, we ought to drink upon our coming among them. Some glasses being presented, filled with bad Malaga wine, we immediately drank "To the prosperity of the University of Upsala." A young American student, who was one of the company present, did not seem to relish the sort of welcome they were disposed to give us: and at the same time being eager to make known the principles he had imbibed, he said we might have swallowed the Malaga without a ceremonious toast: — and then he added, "The students of Upsala, brought up in the school of Liberty, are not constrained, as in England, to interrupt their libations with the palaver of a toast." To this we made answer, that we were thankful for the information; as it would enable us to avail ourselves of that freedom from restraint, which he boasted, to resign to our glasses; having no other use for them than to testify our wishes for the success of a University so celebrated as that of Upsala. However, having

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CHAP. v. set the example, the hearty Swedes were not deficient in courtesy towards the strangers; but all filling bumpers, drank, with loud cheers, "Prosperity to the University of Cambridge!"—while the surly Yankee remained silent, and sat apart, puffing fumes from his pipe.

> The heat of one of these cellars is almost equal to that of a vapour-bath. Sometimes they all sally forth; and woe

> betide the unpopular Professor who may happen to be in

Jonduct of he Students owards the Professors.

their way, when the convives quit their sudatories! They have two different watch-words; one of which controls or animates their fury upon these occasions. If the Professor be a favourite, the cry of 'vivat!' is heard, and he is suffered to proceed without molestation; but if otherwise, a shout of 'pereat!' is the signal for attack; when the Professor either makes his escape as rapidly as he can, or is very roughly Total want of handled. There is no account taken, as in our Universities, of the hours when they return to their lodgings. Every one acts as he thinks proper in this respect. Discipline, if ever any such regulation existed in Upsala, has long ceased; and in the total laxity of all wholesome restraint among a set of untamed youths let loose from their parents, it may be imagined what disorders must ensue. Indeed it was much to be feared at this time, and the event has in some degree justified the apprehension, that this famous University, called, by Stillingfleet, "that great and hitherto unrivalled School of Natural History," together with the

> Empire it no longer adorned, were hastening to their dissolution. The number of students has been said to vary annually from six hundred to a thousand, which is a gross

> > exaggeration

liscipline mong the Students.

exaggeration of the truth: their number at this time, as was CHAP. v. before stated, did not exceed three hundred; and no instance Neglected occurs of more than thirty being present at the same time at ence. any public lecture. It may be urged, and with truth, that public drinking-cellars are not the places in which to look for the reading class of the students: men seriously disposed towards studious employment are seldom those, in any University, who are seen in the streets or in taverns: but there was no such individual to be found in the place as a student distinguished by his talents and by his attention to University studies; and for this plain reason, that there were want of none of those public examinations, and those trials of ability, with distribution of honours and rewards, which powerfully call emulation into action; stimulating that love of fame inherent in every human breast, especially in youth; and feeding the fire of genius, by agitating every latent spark, until it bursts into flame. It cannot be expected, that in a society like that of Upsala, destitute alike of discipline and of all the springs of mental energy, its students will ever become much distinguished. Among a number of young men so circumstanced, it is not at all marvellous to observe an indifference with regard to morals, and a striking disregard of all precept and admonition. The fault is not with them: under a better system, there can be no doubt of their becoming bright ornaments of their country; because a love of truth, strict honesty, goodness of heart, generosity, assiduity, serenity of mind, firmness, constancy, courage, -all these, and many other qualifications, that become a man, and fit him to shine as a distinguished member of society,

Habits of intoxication.

CHAP. v. are the natural characteristics of the generality of the Swedes. There is one virtue, however, which we have been compelled to omit in the list: we may not add sobriety, when we are speaking of the students of Upsala; because their chief vice consists in habits of intoxication: and it is a vice not easily to be exterminated in a country where examples of sobriety are so much wanted. If parents consider it no degradation to be be seen by their children in a state of drunkenness, it is not to be expected that the rising generation should acquire more polished and rational habits. The consequence however, in Sweden, is deeply to be deplored. Young men, grown old before the period of their youth has expired, make their appearance before a traveller with sallow countenances, fallen cheeks, dim eyes, bending bodies, nostrils clotted with snuff, an enormous tobacco-pipe dangling from their lips, their teeth black and carious; sitting in gloomy apartments filled with smoke and fetid air, the floors of which are covered with the filth of expectoration; and at the age of five-and-twenty having anticipated, by their excesses, the decrepitude and infirmities of fourscore. Perhaps it will be said, that this picture is too highly coloured; and that a feeling of disgust, excited by the view of some rare instances where this description is applicable, may have led to too general a remark. Of this others may determine: the remark is made as it was written in the country to which it refers; and if it be found afterwards less extensive in its application than was believed at the time, the author, who has not seen Sweden "with a jaundiced eye," may be acquitted of any intentional deviation from the truth. The passing

passing traveller must see many things in haste, and perhaps CHAP. v. form many of his conclusions too rapidly. He may also, from the very circumstance of his transitory intercourse with the inhabitants, view some things in a more advantageous light that would be admitted by those who reside for a long time in the country. Sometimes, in conversing with those the Sweden. of his own countrymen who have remained long in Sweden, where the author has extolled the hospitable and obliging disposition of the natives, he has been told that the novelty of seeing strangers makes them load the new-comer with all manner of caresses and favours: but that when this wears off, the disposition to confer acts of kindness ceases also. And surely, where a tendency to spunge upon the noble hospitality of a Swede has caused a stranger to exhaust the benevolent feeling extended in his behalf, he is rightly served if he experience the full effect of its diminution. Some of the French emigrants, as it is well known, did make remarks of this nature; and their natural peevishness of temper led them to vilify their benefactors. Sweden is not the only country where they evinced a similar disposition,—cursing, rather than blessing the hand that fed them. De Latochnaye was an emigrant, and a writer of this description; little disposed to acknowledge the extent of his obligation to those by whom he was so hospitably entertained, both in Sweden and Norway: and surely, if any one ever put the Swedish hospitality to its full trial, it was De Latochnaye; who, having met with a serious accident in the north of Sweden, took up his abode with a family of the name of Nordenfalk, with whom he remained until his recovery was complete;

CHAP. v. complete; receiving the whole time a degree of attention and kindness which could not have been exceeded if he had been himself a member of that family: and for once he has permitted himself to acknowledge the hospitality he experienced, during his long residence in the house of Nordenfalk, in terms of gratitude. What becomes then of the observation, that the Swedes only shew their hospitality to a stranger so long as he may be considered as a stranger? At the same time, in describing the manners as well as the good qualities of the Swedes, there are some barbarous habits which cannot be overlooked. The elegancies, and even the comforts of polished life, are almost unknown in many parts of the country: hence it is that the middle class of females are not ashamed to use their fingers, instead of a pocket-handkerchief, in wiping their noses. De Latochnaye, of course, did not allow this practice to escape his observation: accordingly, we read the following facetious remark upon the use to which a pocket-handkerchief is applied by the female peasants of Dalecarlia; and it is also applied to other female peasants throughout the country:-"Le mouchoir, en Suède, est diversement employé par les gens de différens rangs: en se rendant à l'église, les paysannes, qui sont communément proprement vêtues, ont un livre et un mouchoir blanc à la main, ce qui ne les empêche pas cependant de se moucher avec les doigts'." Add to this the abominable practice

^{(1) &}quot;Je quittai enfin la maison hospitalière de Holm, le cœur pénétré des attentions qu'on y avait eus pour moi." Promenade d'un Français en Suède, &c. tom. II. p. 47. à Brunswick, 1801.

⁽²⁾ Ibid. tom. I. p. 241.

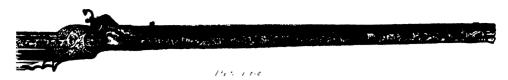
practice, as in Germany, which is confined neither to rank CHAP. V. nor sex, of spitting upon the floors of all the apartments. The sooner such habits are banished, the better: even the subject being, to an English ear, very revolting. We may therefore pass to the mention of other characteristics, more pleasing to enumerate; and bring this Chapter to a close. Nothing is more strikingly conspicuous in the disposition of a Swede, than simplicity of mind and sincerity of heart; but these qualities will be found to degenerate sometimes into great credulity, and a too easy confidence in the honesty of strangers. The Swedes are always open to imposition, and ready to follow the dictates of any leader, however sinister his 'designs may be. In the remotest provinces, upon the coming of a traveller who may want assistance, they advance their money without security; and rely implicitly upon the honour of perfect strangers to repay what necessity has demanded and hospitality has allowed without the smallest hesitation. These reflections occupied the author's mind, as he was preparing to leave Upsala, and to repair once more to Stockholm; while he ruminated upon the long tract of Swedish territory over which he had journeyed, and called to mind the people he had seen. From the Arctic Circle to the Uniform entrance into the Baltic Sea, the Swedes are, with little variaSpect of the Country and tion, the same. A remarkable uniformity may be considered tants. as distinguishing not only the aspect of the country, but also the minds and persons of the inhabitants. A traveller who has been accustomed to remark the sudden change, in Italy, in passing the most insignificant natural or artificial boundary; who sees the people on one side of a bridge quite

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a different

a different race from those on the other; is surprised, in such a country as Sweden, when he finds the natives of the most distant provinces appearing as though they were all members of the same family.





CHAP. VI.

UPSALA TO STOCKHOLM.

Specimens from the Herbarium of Linnæus-Curious Wheel-lock Musket -Gamla Upsala - Shocloster - State of Stockholm upon the Author's Return—Character of the young King—Table-talk—Royal Fête at the Opera House—Evening's Adventure—Reflections on the Death of the former Monarch - Opening of the Sepulchre of Charles the Twelfth—Interruption of the amity between England and Sweden-Club called The Society-Resemblance to Italian Customs — Booksellers — Public Dinners — Interior of the Houses— Coffee prohibited—Anecdotes of the King—Probable Contents of the Chests at Upsala—State of Literature—Deplorable condition of the Country-Places of Public Amusement-Academies-Riots at Upsala -Royal Palace - Chapel - State Apartments - Picture Gallery-Private Cabinets of Gustavus the Third.

THE young Student, who, by his attentions here, had so CHAP VI. amply made amends for his former rudeness to us in Helsingland', possessed, notwithstanding his Gothic manner and appearance,

CHAP. VI. appearance, a heart open and liberal, and somewhat of a taste for science, especially in forming collections of natural history and the antiquities of his country. We before noticed this circumstance', when mention was made of his Herbarium and Runic Calendars. In the single chamber which he occupied at Upsala, and which constituted his whole set of lodgings for bed and board, the room was strewed with the harvest of his summer excursions,—boxes of insects, dried plants, and whatever curious old relique of antient customs in Sweden he could pick up. Among his plants, he had a few specimens that belonged to Linnaus, Specimens from the which that illustrious man had himself pasted upon papers, Herbarrum of Linnaus and, at the back of each specimen, had marked by his own autograph names: he presented no less than five of these to us². With the exception only of the first, they

But

are all described in the Flora Lapponica and Flora Svecica'.

⁽¹⁾ Ibid. p. 552.

⁽²⁾ They have been since presented to the Fitzwilliam Museum, in Cambridge, where they are now preserved.

⁽³⁾ The first, as the autograph states at the back of it, grew in the Botanic Garden at Upsala.

^{1.} BISCUTELLA APULA—a native of Italy, vulgarly called "Spear-leaved Bucklermustard."—The plant is too well known to need further description.

^{2.} ARABIS ALPINA. (Flor. Lapp. 257. p. 213. Amst. 1737.) commonly called . Alpine Wall-Cress. It is a native of the Alps, and other mountains of Europe; being found on rocks, in caverns, and in woods. We found it often in the higher parts of Lapland. It was cultivated at Oxford in 1658; and is now become very common in gardens *.

^{3.} GNAPHALIUM SYLVATICUM. (Flor. Svec. 675. p. 243. Stockh. 1745.) The " Wood Everlasting, or English upright Cudweed."-It grows in several parts of England.

^{4.} LICHEN

But the most singular rarity of his apartment was an old CHAP. VI. wheel-lock musket which stood in one corner of the room, Curious Wheel-lock and which he told us one of his ancestors had formerly Musket brought into Sweden from Pomerania. It was probably a part of the spoils of war: and as it seemed to us to be one of the most extraordinary works of art existing, and he wished to part with it, we bought it of him for the price at which he valued it. Once it must have cost an enormous sum; being in all respects fitted not merely to adorn, but to cut a splendid figure among the weapons of a regal armoury. To give a complete account of this curious relique, would require an entire volume, illustrated with an hundred plates. The whole of the stock, from the lower extremity of the butt to the muzzle of the barrel, is of ivory inlaid with ebony; representing, in a series of masterly designs, the Bible History, from the Creation to the time of David. The style of these designs is like that which may be often observed in old illuminated manuscripts, and in the wood-cuts copied from such illuminations; which seem as if they had been all borrowed from the works of the same master'. In the

^{4.} LICHEN PHYSODES. (Flor. Svec. 951. p. 346. Stockh. 1745.) The well-known Moss of the Birch-tree.

LICHEN VELLEUS. This was found by Linnæus upon the Lapland rocks.
 (Flor. Lapp. 454. p. 345. Amst. 1737.) In his Flora Svecica (vid. 968. p. 353. Stockh. 1745.) he says it is common near Upsala.

⁽⁴⁾ Beginnning from the muzzle of the musket, and proceeding from left to right towards the butt, and back again, the whole length of the opposite side of the stock, there are nearly one hundred pictures exhibited by means of exquisitely inlaid in the first delineation represents the Animal Creation; then follows the Creation and Fall of Man; the Expulsion of the Human Race from Paradise; their Agricultural Labours;

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CHAP. VI. the representation, for example, of the creation of mankind, the Deity is pourtrayed in the dress of the Pope, handing Eve out of Adam's side: yet there are parts of the workmanship equal to the performances of *Albert Durer*, and which exhibit characteristic marks of the age in which he lived.

Gamla I)psala.

Before we left *Upsala*, we should have visited the village of Gamla Upsala, distant about five English miles north of the modern city, if there had been any remains of antiquity there worth the trouble of making an excursion on purpose to view them. In our former journey from Upsala to Gefle, we had before passed in sight of the village church; near to which are the three remarkable tumuli represented in the Vignette to the preceding Chapter, and which tradition has assigned to the bodies of Odin, Frigga, and Thor. Nothing can be more obscure than the history of the first kings, or divinities as they are often called, of antient Scandinavia; in which, the more we seek for information, the farther we seem to recede from all hope of coming at the truth. A great source of error has been caused by confounding the Teutonic with the Celtic nations, which were, ab origine, two distinct people. Conical heaps raised over the dead are generally Celtic

the Death of Abel; the History of Noah; the Deluge; &c. &c.—the whole being considered, in all probability, as a connected series of powerful amulets, calculated to protect the bearer of this musket from all dangers "ghostly and bodily."

⁽¹⁾ See the account of a splendid MS. in the Mostyn Library in Flintshire, as communicated by the Author to the celebrated Pennant, for his "History of the Parishes of Whiteford and Holywell," p. 74. Lond. 1796.

⁽²⁾ A Vignette prefixed to this Chapter will serve to shew the form of this curious weapon, and also one of the numerous representations upon the stock.

⁽³⁾ See Mallet's Northern Antiquities, Pref. to Vol. I. Edinb. 1809.

Celtic sepulchres; but in the rarity of Celtic monuments in CHAP. VI. Sweden and Norway, added to other circumstances conspicuous in the appearance of the ground about the supposed sepulchres of Gamla Upsala, which have never yet been opened, or in any way duly examined, there is reason to suspect that these will hereafter be found to be natural elevations, and not artificial heaps. A little time spent upon the spot may hereafter enable some curious traveller to ascertain the real nature of those tumuli. If they should be proved to be places of burial, there is little probability of their having been constructed by the ancestors of the present race of Swedes, who in the period when such mounds were raised over the dead in the north of Europe were not inhabitants of Sweden. At a much later period in history, when Mithradates sought for refuge in those deserts of Russia now inhabited by the Don Cossacks, the followers of Odin, being obliged to withdraw themselves from the vengeance of the Romans, began to seek, at this distance from the field of Pompey's triumphs, that safety which they could not find in their own country.

We now took our last leave of *Upsala*, and set out again for *Stockholm*, through an open, flat, and fertile country.

We passed *Skocloster*, as in our former journey, on the *Shocloster*.

right,

⁽⁴⁾ Mallet makes their principal city, at that time, Asgard, between the Black Sea and the Caspian; considering them as the Ases, a race of Scythians; and thinks there is reason to believe that Azof, or, as he writes it, As-of, derived its name from this nation. But who will venture into an inquiry where, as he judiciously observes, "the most profound researches, the most ingenious conjectures, discover nothing to us but our own ignorance."

CHAP. VI. right, the seats of the Counts of Brahe, one of the oldest families in Sweden. In the house there is a curious collection of antiquities and other rarities, which are esteemed worth seeing. It lies out of the main route. In this part of our journey we observed, upon the eastern side of the road, a few reliques of the primeval inhabitants of the country; such as, rude upright masses of stone and tumuli, which seemed to be sepulchral mounds.

> The political events of the day, upon our return to the Capital, will have lost all interest, from the length of time that has elapsed before the publication of this part of our Travels; but as they are intimately connected with the Swedish history, we shall not entirely omit the mention of them. A number of express couriers, passing us upon the road, had already apprized us of the birth of the young Prince, which had just taken place; messages being despatched with the intelligence to all parts of the kingdom. He was born on Friday, November 8th; and afterwards christened by Troil archbishop of Upsala. arrived upon the 16th. Some slight disturbances had taken place, which were very generally the subject of conversation. Upon the day appointed for the celebration of the birth of his Majesty Gustavus the Fourth, the shopkeepers of Stockholm had given a dinner to the French Consul. Among other ceremonies at this fête, two busts had been prepared, and publickly exhibited; the one of Buonaparte, and the other of Field-Marshal General Suwarof. The company drank bumpers of wine to the health of Buonaparte, but filled their glasses with water when Suwarof's health was proposed,

the Author's

proposed, and discharged their contents in the face of his bust. CHAP. VI. At this the King had been so much displeased, as already to shew the most marked resentment towards some of the offenders. Dupuis, leader of the opera band of musicians. was banished the kingdom. One of the comedians was also ordered to quit the country; together with Robinhof, master of the tayern where the dinner was held. It is necessary to state these particulars, in order to explain what happened at the Theatre as soon as we returned. The King was present; when the comedian here alluded to, in the part he acted, held a dialogue with an actress as a chambermaid, who addressed him in the following manner:-

"Begone! what are you doing here? You must be sent away."

To which he answered:

"It may be so: but I shall not stir. I am very well where I am, and intend to remain here."

At the delivery of these words, a sudden and very vehement applause burst from the audience. The King, evidently ruffled, rose from his seat, waving his hand, and calling silence: but the applause became louder than ever, and his Majesty sate down disconcerted. The actor, it seems, had been ordered into exile; but had not been banished, because the King owed him above a thousand dollars. After the piece concluded, the debt was paid, and the player was ordered to leave Stockholm within twenty-four hours. We had frequent opportunities of hearing the King's character character of discussed. He was said not to have any private intimacies. King nor to have been influenced by any of those creatures called

favourites,

CHAP. VI. favourites, because he never had one. He superintended and directed every thing himself; consequently every thing was mismanaged. The state of the public finances was becoming daily more and more deplorable: and this was to be expected, where so young a monarch presided over and governed all things, endeavouring, upon all occasions, only to shew how completely absolute he was. His Ministers, moreover, were men utterly incapable of rendering him any effectual counsel, if they had been consulted,-which was not the case. One day, the merchants of Stockholm waited upon him, to represent the ruin that would inevitably befal them, if the public credit were not retrieved: to which the young monarch replied, that "it was not for a set of commercial men to trouble their heads with such matters; that he had already considered their situation, and had taken proper measures to prevent the evil from taking place."

When the Queen's accouchement drew nigh, according to the usual ceremony of etiquette observed more or less in many Courts, but rigidly adhered to in Sweden, the King, the Duchess of Sudermania, and other exalted personages, amounting in all to twenty persons (among whom were some unmarried men), were stationed about her person, to become the spectators of her pains and delivery. It was said, that, with a view to avoid the indecency of such an exposure, the late Queen kept the moment, when her throes were coming on, a secret; by which means she escaped a public accouchement. At this time, no persons in Stockholm, who affected to be versed in State secrets, or who, from their situation.

situation, might be supposed to possess accurate knowledge CHAP. VI. with regard to such matters, regarded the reigning sovereign as the son of his predecessor. The Courts of despotic Princes are generally the very hot-beds of every species of revolting slander; and, in the list of these, the Court of Sweden' was peculiarly conspicuous for the foulness of the calumnies which were set on foot against every individual about the throne. We shall neither sully these pages, nor offend the Reader, by detailing the opprobrious anecdotes which were everywhere in circulation respecting these august personages: but as the similitude which the reigning monarch was supposed to bear to General Monk, a friend of the late King, who was banished from the Swedish Court during the Regency, was often urged, in table-talk, as a proof of the Table-talk. relationship in which he stood to this officer, it would not be consistent with that freedom of communication which has been shewn in conducting the whole of this narrative, if no allusion were made to the fact. We could neither confirm nor contradict the truth of the supposed resemblance, having never

(1) It may be said that the government of Sweden was not wholly despotic. Mr. Core considered the King of Sweden as a limited, but not a despotic sovereign. (See Travels, &c. vol. II. p. 372. Lond. 1784.) But the same author acknowledges (p. 369) that "the whole of the executive power is virtually vested in the King: for though it is said to be entrusted to him conjointly with the Senate, yet, as his Majesty appoints and removes all the members of that council, and, in the administration of affairs, asks only their advice, without being bound to follow it, he is absolute master of the Senate." Sheridan (Hist. of the late Revolut. in Sweden, &c. p. 301) considered the King of Sweden, after the Revolution in 1772, as "no less absolute at Stockholm, than the Grand Signior at Constantinople."

CHAP. VI. never seen the officer to. whom allusion is made. generality of the Swedes considered the features of Gustavus the Fourth as a striking resemblance of the portraits of Charles the Twelfth: and, after examining the cast' made of the face of Charles, we were struck by an evident family likeness; which, at least, goes to prove, that if such indications of descent be worth attending to, there is as much to urge for, as against, his legitimacy. For the rest, in his figure, Gustavus the Fourth was thin, and apparently feeble, with a pale countenance. He looked most advantageously when dressed in regimentals; and worst of all when he appeared in the effeminate gala suit which the late King had introduced into the Swedish Court;—a style of dress better suited to mountebanks or stage-players, than for the representatives of the warlike Goths!

koval Fête at the Opera House.

Upon the 21st of November, the entertainments of the evening at the Opera House were given gratis by the King to the public. To gain admission, it was only necessary to go in full dress; and we were present upon that occasion. coup d'wil, upon entering the theatre, was very brilliant. The boxes consisted of five tiers of seats; the ladies being ranged in the front rows. The stage was lighted by two large

⁽¹⁾ This will be further described in the sequel.

⁽²⁾ Dr. Thomson, who has written a very interesting chapter on the Character and Conduct of Gustavus the Fourth, says that the likeness to Charles the Twelfth was not confined to his person, but that he possessed certain qualities which gave him a moral resemblance to that prince. (See Thomson's Travels in Sweden, p. 115. Lond. 1813.) See also the Portrait of Gustavus the Fourth, engraved for Dr. Thomson's work, which is a striking likeness of him.

curtain rose. In the centre of the pit, upon a platform

large cut-glass chandeliers, which were drawn up when the CHAP. VI.

covered with green cloth, were placed two gilded chairs, for the reception of the King and Queen. Her Majesty being at this time in child-bed, the King alone made his appearance. Many of the State officers were stationed waiting for his arrival, when we entered the theatre. At each side of the entrance to the pit were placed the King's Guards, in pompous theatrical suits of blue cloth, with polished coats of mail, and enormous helmets surmounted by tall plumes; producing altogether the most grotesque effect, by combining somewhat of the manly chivalrous aspect of the warriors of antient days with the wretched effeminacy and scenic taste of the modern Court. It was enough to rouse the ghost of Gustavus Vasa, to view the heroes of Sweden in this deplorable disguise; wanting only their cheeks painted, to fit them for a booth at Bartholomew Fair. While we were thus intent upon the motley Evening's figures of the soldiers, a bustle in the orchestra, and a general movement among the Guards, announced his Majesty's approach; who entered, followed by the Duchess of Sudermania, and several of his retinue, dressed in the absurd and fantastic manner which we have before alluded to, but strictly according to the regular costume of his Court; wearing, beneath a cloak, a jacket of yellow 'silk, and large yellow roses in his shoes: and, as if to afford the most striking contrast possible to his own appearance, and to render it still more ludicrous in the eyes of the spectators, he was followed by a gigantic attendant in complete armour, the enormous plumes

CHAP. VI. plumes of whose helmet, towering aloft, threatened to bury the diminutive and meagre figure of the King. The audience immediately rose, but the utmost silence was observed. His Majesty, advancing towards the regal chair, was for some minutes engaged in bowing to all present; to the audience in general, and to all the foreign Ministers in particular. Then making, with his chapeau bras, a signal to the musicians in the orchestra, the band began to play; and he sate down. Between the acts of the opera, he was occupied chiefly in conversation with the Duchess his aunt, and the Russian Minister; and his marked attention to the latter was noticed by the generality of those present, who were interested in the politics of the day. Having been accustomed to see him before only in his regimentals, we hardly recognised him in his Court dress. When he sate down, he wrapped his silk cloak about him, thus giving to this part of his attire the appearance of a petticoat, beneath which peeped his coloured shoes set off with large yellow rosettes; so that his whole figure, truly feminine, might have been mistaken for a female. During this evening's entertainment, an adventure occurred which will afford a specimen of the national manners. Two Italian gentlemen, with whom we were intimately acquainted, Signor Acerbi, author of Travels in Sweden, Lapland, and Finland, and his young companion, Signor Bellotti, were seated in the box of the Prussian Minister. gentlemen, after the close of the first act of the opera, finding that no ladies had arrived to occupy the front seat, ventured, having first asked permission of the Minister to whom the box belonged, to place themselves in the front row,

and thereby obtain a better view of the King and of the CHAP. VI. stage. They were habited in plain black suits, which, as it is well known, are often used abroad, by way of substitute for the full Court dress. It may be imagined what their uncasiness was, in finding that they had no sooner seated themselves in their new places, than they were become an object of uneasiness to the royal party stationed in the pit. The Duchess of Sudermania was observed to regard them for some time with apparent agitation; and at length, speaking to the King, his Majesty was pleased to order that a corporal of the guard should be sent to remove them from their station. But the Director of the theatre, to whom this order was given, being well acquainted with them, went up, and represented to them his Majesty's disapprobation of their appearance in the front rank, without having on the full Court dress; desiring them, at the same time, not to retire from the theatre, but to sit backward, so as to escape further observation from below. Some of the audience, witnessing this transaction, thought proper to insinuate that his Majesty mistook the two Italian gentlemen for Englishmen;—there being at this time a slight misunderstanding between our Court and that of Sweden, in consequence of the neglect which it was said his Britannic Majesty had shewn to a Letter written by the Swedish Sovereign respecting the capture of a Swedish convoy. This circumstance had rendered it difficult for our countrymen to obtain a presentation at the Swedish Court; as our Minister had ceased to make his appearance there, and had been omitted in the invitations recently sent

CHAP. VI. to the different foreign Ministers. Whether there were any truth in the supposed intention of the young King and of his aunt, to offer this indignity with any feeling of hostility towards our countrymen, we did not give ourselves the trouble to inquire. •The affair served to afford a momentary topic of conversation in the different circles: meanwhile, we experienced everywhere the same kindness and hospitality which we had invariably met with since our first arrival in the country.

Reflections on the death of the late mo-

narch.

Little needs be said of the style of the performance at a Swedish opera. The singers and dancers are equally below mediocrity. The band is generally good, and the music well given. The management also of the scenery, owing to the great pains bestowed upon the most trifling theatrical concerns during the reign of the late King, still reflects credit upon the mechanist who is employed. For our parts, during the whole of this evening's representation, neither the splendours of the Court gala, nor the presence of the Sovereign, nor the stage decoration, could abstract our thoughts from dwelling upon the horrible tragedy which was acted here. The assassination of the late king, with all its cruel atrocities, dwelt full upon our minds;—and who could say how soon, or how late, the same sanguinary scene might not be renewed? The young Gustavus, seated; in his silken vest, upon the very floor stained with his father's blood; and surrounded by the same courtiers, seemed, from all the circumstances of his situation and character, marked to become another victim of the plots and conspiracies that were going on: and wonderful to us appeared the calm and placid placid indifference with which the young monarch sate occupied in attention to the turn of an Italian Rondo, or busied in enforcing some trivial rule of Court etiquette, upon the identical spot yet almost recking with the murder of his father.—But we had not yet visited Russia!!!

Desmaisons, the celebrated author of an Essay on the Revolutions of Sweden, in developing from national character and foreign political interests the true sources of those changes which have successively agitated the Swedish dominions, has also unconsciously pointed out the steps which ultimately led to the death of the very Sovereign who accomplished the most remarkable of all the revolutions the country has sustained1. Can it be supposed that an event of such immense political importance, reflecting such a distinguished lustre on the character of Gustavus the Third, and such dismay upon his adversaries, would be speedily forgotten; or that the hatred towards him, increased by the annihilation of the self-interested projects of a party, ever slept, so long as any of that party continued to exist in Sweden, and to hold communication upon the subject of the loss they had sustained? It only taught them to be more circumspect in carrying on their designs against the King's life than they had hitherto been in executing their former projects. In our long journey through Sweden, we often endeavoured to procure

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⁽¹⁾ See "Histoire de la dernière Révolution de Suède," par Jacques Le Scene Desmaisons. Amst. 1782.

⁽²⁾ Gustavus the Third was twenty-five years old when he was proclaimed King, the year before the Revolution of 1772.

CHAP. VI. procure accurate information relative to the real authors and abettors of the conspiracy which ended in his assassination by the hand of Ankarström; but the circumstances respecting it were either told with the most evident exaggeration, or with an air of studied and stupid mystery, which, bordering upon affectation, prevented further inquiry. From all, however, that we could collect, notwithstanding the difficulty of coming at the truth, it seemed plain that the conspiracy had been going on for a long time before its object was accomplished in the death of the King, and that the inhabitants of the most distant provinces in the realm were engaged in its operation. The only wonder is, that where the number of the disaffected was so numerous, a secret of such moment could so long remain concealed. Some of the Swedish gentry maintain that the number of the conspirators exceeded a thousand. Judging only from the facts which have transpired; from the conduct of the enemies of the King, and of suspected persons before and after his death; there is good reason to believe that individuals the most distinguished by their rank, by their relationship to Gustavus, and also others who pretended to class among the number of his most intimate friends, were implicated in his murder. We could not help thinking, that in the crowded assembly we now beheld, and perhaps among those who were in immediate attendance upon his son, there were persons well qualified to dispel all doubts upon this subject.

Opening of the Sepulchre

A few days after this fete at the Opera House, we went to of Charles the RIDDERHOLM CHURCH, to see the sepulchre of Charles the Twelfth,

King. In the uncertainty which has always prevailed respecting the death of this hero, his remains have more than once before been submitted to examination, with a view of ascertaining, from the appearance of the scull, whether the wound which caused his death were inflicted, or not, by the hand of an assassin. Perhaps it was this curiosity on the part of the Sovereign which caused the tomb to be again violated. We arrived in time to see the coffin, which had been also opened, but was now closed. In removing the principal slab of black marble placed over this coffin, the workmen had broken it near the corner, and masons were repairing it when we came to the spot. The coffin, meanwhile, was exposed to view: it was covered with crimson velvet, and adorned with gold fringe. We observed that it was still in as perfect preservation as when the burial took place; the fringe being so strong, that we had difficulty in pulling off a few threads to bear away as a memorial. Some of the party present complained of an unpleasant odour coming from this

Twelfth, which had been opened by order of the young CHAP. VI.

We waited upon our Minister soon after our return to the Interruption Capital, and received from him the intelligence of the un- subsisting bepleasant state of affairs between our country and Sweden, land and Swe-

church.

coffin; but we considered it as imaginary, the sepulchre having been some time open, and the coffin carefully closed immediately after the King's visit. Ridderholm Church is the regal commetery of the Kings of Sweden. All the Knights of the order of Seraphim are also buried here; and many of the principal families of Stockholm have their vaults in this

Club called The Society.

CHAP. VI. which seemed likely to end in a war. This, of course, prevented our appearance at Court; but, in lieu of a presentation to his Majesty, he proposed taking us to the Society, and introducing us there to the different ambassadors, nobles, and officers of distinction, which constitute its members. This Club is the greatest resource a stranger in this country can possibly enjoy: it is regulated upon the best principles, and kept in the most perfect order. Its meetings are held in one of the grandest edifices in Stockholm, fronting the water, and commanding a noble prospect of the principal buildings of the city. Being conducted thither, we entered a suite of magnificent apartments, elegantly furnished, and in all respects remarkable for the neatness and propriety everywhere displayed. One room is appropriated to reading: and here all the principal Gazettes published in Europe, together with all sorts of periodical works, French, German, Danish, and Dutch Papers, are found lying upon the tables, for general There is, moreover, a secrétaire, fitted up with all sorts of conveniences for writing. Every evening, all these apartments are lighted up with wax candles. In the reading room, the most perfect silence prevails; and in a chamber adjoining, there are couches for repose. Beyond this is the ball-room; and farther on are separate rooms for billiards, cards, and for eating. In the ball-room are suspended the printed rules of the Society, in the French and Swedish languages. are permitted to enjoy all the privileges of the club during two months; but if they remain longer in Stockholm, they must be presented a second time and become members, or be excluded. Every member subscribes twelve rix-dollars annually

annually to the fund. The dinners and suppers here are CHAP. VI. excellent, every thing being cheap and good, and the expense small. A dinner, without wine, costs only sixteen-pence English; and until lately the price was lower. The servants of the Society speak French, German, and Swedish; and are all clad in the livery of the club. There is, moreover, always in waiting a Directeur, or Maître d'hôtel, who superintends all minor affairs, attends at and directs the order and serving of the dinners, and collects the payment due from the several guests. The apartments remain open during the whole day. We have seldom enjoyed a more pleasing relaxation, or met with more agreeable company than we found here. Having several friends with whom we used to associate at the Society', we came daily to this place; and, in fact, there is no place in Europe where foreigners engaged in travel will meet with better company, more polished manners, or less restraint. Add to this the luxury of being, for once at least in Scandinavia, in an assembly where smoking and spitting are not allowed. The most perfect order prevails in all the apartments; every one being at liberty to enter, or retire without form, as he pleases². Some persons belonging to the Court, who were proposed as members, had been rejected in the

⁽¹⁾ In this number were, the celebrated Brougham; Acerbi, the Lapland traveller; Mr. now Sir Charles Stewart; the Rev. Mr. Kent, and Mr. Jarrett, whom we had before seen in Norway; and Mr. Bellotti.

⁽²⁾ An establishment of this nature, under the name of "The United Service Club," has been lately founded in London, which seems to be conducted upon a similar plan.

CHAP. VI. the ballot; at which the King was much displeased, and endeavoured, as it was said, to withdraw the courtiers from their attendance. If this were true, it had not produced the desired effect; for the numbers, instead of being diminished, had lately been considerably increased; the first families in Stockholm being the most regular visitants.

> As in all large cities, the traveller must expect to meet with less of the characteristic hospitality of the Swedes in Stockholm, than in other parts of the kingdom'; and it is here, in particular, that his reception will a good deal depend upon the relative state of politics with regard to his own country. We found our situation somewhat altered, since our last visit, by the degree of coolness which had sprung up between the Court and our Minister. Neither is there much in the place itself to afford instruction or amuse-Excepting the great square of Nordermalm, the ment. streets, though of very considerable length, are neither broad nor handsome. There is no foot pavement; and the shops are everywhere wretched. The houses are lofty, and they are all white-washed. The different families, as in Italy, reside upon separate floors, or stories, one above another; the ground-floor being appropriated to shops, and the upper stories to private families. There is, moreover, a resemblance between the customs of the two countries. If a stranger have any business to execute among the tradesmen, and be not careful to set about it before noon, the whole day

Resemblance to Italian Customs.

is

^{(1) &}quot;Plus on s'approche de la capitale, moins on aperçoit cette respectable bonhomie, qui caractérise généralement le paysan Suédois des provinces." Promenade en Suède, par De Latochnaye, tom. I. p. 62. Brunswick, 1801.

is lost. At mid-day, every body is at dinner: the merchants CHAP. VI. have then left their counters, and the shops are shut. Afterwards they are all fast asleep; which at this season of the year is the more inconvenient, because as soon as they awake it is dark. Two hours may be deemed the whole of the time allowed for daily affairs abroad,—from ten in the morning until twelve. Before ten it is not usual for families to make their appearance; and if after this time a traveller remain in his lodgings, engaged as he is very likely to be with his own private affairs, it is in vain that he endeavours afterwards to get any thing done in the town.

One of the first things it is natural to seek for, in arriving at any place upon the Continent, is a bookseller's Bookseller's shop: but the booksellers here have no catalogues; or if any thing of this kind be produced, it is written wholly in the Swedish language. And with regard to the dealers themselves, never were persons of their profession so little likely to recommend their wares, as the booksellers of Stockholm. If a customer enter, they rise not from their . seats to assist him in looking over the dusty lumber of their warehouses: and if they were disposed to shew him this civility, the search would be vain; because the books, not being bound, but lying in quires, and confusedly mixed together, can only be regarded as so many reams of paper in a stationer's shop.

When Englishmen are invited to dine with the inhabitants, Public Dinners it is a constant practice to prepare a quantity of what is called roast beef for their reception at table: and the opinion which

CHAP. VI. which all foreigners have, that we cannot dine without a copious allowance of animal food, especially of beef, is very diverting. The host gathers consequence to himself in having provided this kind of diet, and, smiling at his guests, calls out, in an emphatical tone, 'Rosbif!' (for so it is generally written and pronounced) as the mangled heap of flesh which bears this name is handed round; not having the smallest resemblance to any thing so called in England, but consisting of lumps of meat piled upon a dish, tough, stringy, and covered with grease. Of this if you do not eat heartily, offence is sure to be given. In fact, if an Englishman wish to render himself agreeable to the Swedish gentry, he ought to prepare himself by fasting for at least two entire days before he visits them. If he do not devour every thing that they set before him, and with a degree of voraciousness proportioned to their good wishes for his making a hearty meal, he will never give satisfaction. We have before alluded to these remarkable traits of the national cha-. racter: they carry us back, in imagination, to those Gothic festivals, when animals were roasted whole, and the guests were served with heaps of flesh by attendants in complete armour, who carved with their swords: and they serve also to remind us of those fables of the Edda, or antient Icelandic Mythology, in which to eat voraciously is described as a qualification, worthy not only of a warrior, but of a God'.—

We

^{(1) &}quot;LOKE then said that his art consisted in eating more than any other man in the world, and that he would challenge any one at that kind of combat.—'It must indeed be owned.

We met with an instance of the dissatisfaction given by the CHAP. VI. want of this qualification, where we least expected it; namely, in the Directeur of the Society. We might have supposed that the less the company devoured at his table, the greater would have been his profit, and of course the higher his gratification. But even here, seeing the Author refuse to partake of a dish which one of the servants brought to him after he had completely dined, the Directeur exclaimed, as he retired, in a tone loud enough to be overheard, with true Swedish feeling and with a broad oath, "What, you are determined not to touch a morsel! Has it been usual with us to set before you despicable food?"—The instances of offence given in this way were alluded to in a former volume*; and the subject would be deemed too trivial for repetition, were it not essential to the due representation of the manners and customs of the inhabitants. The style of a Scandinavian dinner we have before described, in our account of Norway; for in this respect there is not much difference between the two countries. No person, on any account, is permitted to touch.

owned,' replied the King, 'that you are not wanting in dexterity, if you are able to perform what you promise.' At the same time he ordered one of his courtiers who was sitting on a side-bench, and whose name was Loge (i.e. Flame), to come forward, and try his skill with Loke, in the art they were speaking of. Then he caused a great tub or trough full of provisions to be placed on the bar, and the two champions at each end of it; who immediately fell to devour the victuals with so much eagerness, that they presently met in the middle of the trough, and were obliged to desist. But Loke had only cat the flesh of his portion; whereas the other had devoured both flesh and bones. All the company therefore adjudged that Loke was vanquished."—Edda, or Antient Icelandic Mythology. See Mallet's Northern Antiquities, vol. II. p. 90. 'Edin. 1809.

⁽²⁾ See Part III. Sect. I. Chap. XV. p. 341. Lond. 1819.
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CHAP. VI. touch, or offer to his neighbour at table, the contents of the dishes that are placed before him. They are all removed, and brought round to the guests one after another in a regular order; consequently the business of dinner lasts two or three hours;—the longer, the more consistent with a splendid entertainment. Before sitting down, when the company are all stationed in their places at the board, a pause of total silence ensues; and this, after continuing for the space of a minute, is interrupted by a bow from the host, which is the signal for every one to become seated. The mistress of the house is conducted from the drawing-room by the person of the greatest rank present; the rest of the gentlemen each taking a lady, as with us. The ceremony of the whet before dinner, which is universally practised over all the North of Europe, takes place in an adjoining room, a few minutes before dinner is announced: there the company eat caviare, turnipradish; raw turnip or carrot, or a bit of some salted fish, and take a dram of brandy, by way of provoking an appetite; and this they do as heartily as if they were making a meal;—like the inhabitants of some part of Scotland, who swallow a hot sea-gull, or kiddy-wake, full of fish-oil, for the same purpose. The master and mistress of a family have no particular place assigned them at their own table, but mix with their guests, and generally sit at one of the sides. This custom, perhaps, is an imitation of French manners. When the company rise after dinner, the same pause and silence ensues as before; after which, the bow being again made, the gentlemen, salute the hand or cheek of the mistress of the house, and shake hands with the master. These customs and

ceremonies

ceremonies are the same everywhere, whether in the mansions CHAP. VI. of the nobles, or the dwellings of more private individuals.

The principal article of furniture in every apartment is a Interior of the Houses. stove, which is generally large, and covered with Dutch tiles. In the houses of the great, these stoves are sometimes formed so as to represent the pedestal of a column, and then they often support a statue; or if not so ornamented, they reach to the cieling of the room. Where the stove and flues are solely formed of iron, and not properly encased with stone, tiles, or stucco, a close disagreeable smell is caused in all the rooms: to obviate this, the inhabitants frequently burn perfumes, or place a scented pot pourri upon the stoves. The most insignificant article of their furniture cuts a more imposing figure in English houses,—where, however, it is never publickly exhibited,-namely, the bed; this is generally small, uncomfortable, and more like a mere couch for a drawing-room than for a place of repose at night. In the lodgings of single men, it is always seen as a dirty and unpleasant spectacle; not made up during the first half of the day, and offensive to more than one of the senses during the other. The windows of the rooms, in the best houses, are doubly glazed; and hung with long shreds of coarse gauze, by way of representing what they are not; that is to say, curtains; being about a quarter of a yard wide, and of course merely ornamental. The walls are hung with painted canvas, sometimes in imitation of India paper; at others, in panels, after the French taste. The floors are also painted.

The prohibition respecting the use of coffee was at this coffee time so strictly observed in Stockholm, that in genteel families

CHAP. VI. it was never presented: in some of the inns they offered it to strangers in a contraband way. We have seen even the most gay and dissipated of the young Swedes refuse to drink it, when invited by a company of foreigners who have had it before them. The use of tea had been substituted in its place. This beverage the Swedes call Te-Watn, or Tea Water; a very appropriate name for the infusion, as they prepare it; for, in general, that which they offer under this name is nothing more than warm water served in small tea-cups.

Anecdotes of the King.

Soon after the prohibition respecting coffee had been issued, his Majesty's own valet de chambre, a man of tried fidelity and very amiable character, either through some inadvertence on the part of his servants, or a momentary thoughtlessness in himself, having invited a party to visit him at Dröttningholm, was known to have violated the prohibition; coffee having been served upon that occasion. The next morning, one of the attendants, from a desire to supersede the valet in his place, and actuated by envy at the confidence reposed in him by his royal master, informed his Majesty of the transaction. The King took no notice of it at the time; but when his valet came to undress him, he said, "Is it true that you gave coffee to a party which visited you from Stockholm, yesterday evening." "It is but too true, sire," said the valet, "and I saw the extent of my transgression in the moment it was committed." "Well," said his Majesty, "go now to the Intendant of the Police, and tell him what you have done, and pay the penalty; and then

come

⁽¹⁾ One rix-dollar for every cup of coffee used.

come back to me."—When the valet returned, and the King found that his orders had been obeyed, he sent for the informer, and thus addressed him. "My valet confesses he has been guilty of violating the prohibition with regard to coffee, as you told me he had done; and he has paid the penalty for so doing. It is therefore only necessary for me to add, that in future I shall have no further occasion for your services."

Another circumstance also occurred, which placed the character of Gustavus the Fourth in a very amiable light;—and we can vouch for the truth of both of them.

A Swedish Colonel, by an accidental fire which consumed his house, lost the whole of his property. Some time after, a lottery was set on foot by his friends, to reimburse him. the opening of this business, a letter arrived from Pomerania, inclosing one hundred and fifty rix-dollars, without the name of any donor, but with a short note, requesting that the Colonel would remember the "broken punch-bowt." a long time before he could unravel this mystery; but at last he recollected that many years before, being in a tavern where there was a great concourse of people and much rejoicing, a female servant dropped from her hands a large China punch-bowl full of punch. Her mistress, in violent anger, threatened her with instant dismissal, and that she should be sent to prison if she did not make good the loss: upon which the Colonel interceded in behalf of the poor. girl, and himself paid for the damage which had been sustained. This curious anecdote becoming the subject of conversation in Stockholm, at length reached the ears of the

King.

CHAP. VI. King. Gustavus was much pleased with it, and sent a present of one thousand rix-dollars, with this message: "I am aware that the Colonel's friends have instituted a lottery upon his account. It is prohibited, by the laws, to undertake any lottery, without previous permission from the Master of the Police. Tell the Colonel I know that officer; that he is an humane and polite man, not likely to refuse a reasonable request: it is my wish that the Colonel should ask his permission for the lottery, that I may be enabled to bear a part in it."

> We have the more readily inserted these traits in the character of the reigning monarch, because the anecdotes related of him, in general, were neither numerous nor interesting. Having no favourite, and relying altogether upon his own judgment, which however was very incapable of guiding him, it was not easy to penetrate the reserve that shrouded his private life from observation. The few things that had transpired afforded a favourable view of his disposition. From his earliest boyhood he was little disposed to familiarity with any one. When only eight years of age, he attended Gustapus the Third to a grand Council. Upon this occasion, stepping before his father as he advanced to the regal chair, and placing himself upon it, he repeated, with affected gravity, a passage from one of the Swedish tragedies:-"Let us sit on the throne of our ancestors." The King, instead of being pleased with his son's humour, seemed rather piqued; and abruptly handing him down, said, "Come, come, young usurper! there will be a more proper season for these sentiments, when I am gone!".

With regard to other stories circulated in Stockholm, respect- CHAP. VI. ing either the young Sovereign or his fair consort, as it was impossible to give credit to them, so it will not be necessary to relate them. The general tenor of all of them was to represent the King as a haughty, imperious, but benevolent man, destitute of sound judgment and literary talents; without any love of the Fine Arts, but desirous of enforcing strict obedience to the laws, both by precept and example: and the Queen as a giddy cheerful romp, more disposed towards laughter than serious reflection, who would preier a game at blindman's buff to any State ceremony, however splendid the situation she might be called upon to fill.

We met with a bookseller in Stockholm who assured us Probable contents of the —and we saw no reason to doubt the truth of what he said— Chests at Upthat he had often been employed by the late King, Gustavus the Third, as his amanuensis. He declared that he assisted that monarch in arranging and in copying many of the manuscripts now deposited at Upsala under such strict injunctions of their being kept secret until the time arrives for opening the chests containing them'. He seemed well acquainted with the nature of these manuscripts; and, as his character is highly respectable, and the information he afforded was given without the least solicitation on our part, it may perhaps be worth attending to. The most important part of these papers, he said, as written by Gustavus the Third, contains the History of his own Times; composed with a depth of political knowledge, and most profound reflection,

such

⁽¹⁾ See the former Chapter.

Such as might be expected from his uncommon talents and observation. This History, together with the State Papers necessary for its illustration, probably make up the principal part of this mysterious deposit, which has excited so much curiosity.

State of Literature.

The state of literature in Sweden has been less promising since the death of Linnæus than that of any other country in Europe. In the sciences, however, Chemistry, in spite of every obstacle to which it has been opposed, in a country wanting many of the conveniences necessary for its progress, and all the patronage essential to its encouragement, has made rapid advances. The chemical discoveries of the Swedes, in all their Universities', redound greatly to their honour. Yet the science of Mineralogy, connected as it is with Chemistry, is hardly anywhere at a lower ebb than in Sweden: and Geology may be considered as not having yet been introduced into that country; since we cannot bestow the name of Geology upon those testimonies of its presence which the Swedes sometimes exhibit under the names of Geological Cabinets. Botany, moreover, seemed to us to be fast declining; as if all its blossoms had drooped and died with its great master. Other branches of knowledge appeared to be involved in the same fate. History, Metaphysics, Laws,

Languages,

⁽¹⁾ Witness the surprising talents of Berzelius; himself a host, filling all Europe with admiration of his great abilities, and gratitude for the importance and profundity of his researches. Witness also the discoveries made by his pupil, Arfvedson. Not to omit a tribute due to the names of Ekeberg of Upsala, Gahn of Fahlun, Hisinger, Hielm of Stockholm, and many others.

⁽²⁾ The name of the University of $\mathring{A}bo$ would hardly have been known in the rest of *Europe*, but for the chemical discoveries of Gadolin.

Languages, Music, the Belles Lettres, were only known as so CHAP. VI. many appellations to which there was nothing applicable. The Fine Arts, once flourishing in this metropolis, languished Deplorable condition of for want of encouragement. Add to all this, a gloomy prospect in the State, seeming to foretell the bursting of a storm, which was gathering fast around the throne; public finances annihilated; national credit extinct; taxes accumulating; agriculture neglected; manufactures ruined; insurrections ripe in every quarter; the poor oppressed and murmuring; the liberty of the press banished; projects, the most absurd, bursting, like bubbles, as fast as they were formed;—such was. at this moment, the abject and deplorable state of this land of heroism, honesty, and benevolence. It seemed to every reflecting mind as if Sweden awaited one of those tremendous moral revolutions which, by tearing to atoms the constitution of the country, offers, amidst its ruins, the materials of a more solid structure. The necessity of convoking the Diet was becoming every day more and more apparent; yet the courtiers, twelve or thirteen of whom surrounded the throne, being averse from such a measure, as justly alarmed at the consequences of an inquiry into the state of public affairs, were using all their influence to prevent it, by persuading the King to disregard the agitation which was evidently gathering force in every quarter of his kingdom. Such was the abject state of the paper currency, that Bank-notes were in circulation of the nominal value of eight-pence, English; but which were considered as literally worth nothing; no one being willing to take them. The commerce of the country, of course, experienced a lamentable VOL. VI. check: I,I

the Country.

CHAP. VI. check; and corn, of which the importation annually cost three millions of dollars, became woefully scarce. In this deplorable condition of things, the State candle was burning at both ends. The regulations made to prevent the consumption of coffee and of spirits were wholly ineffectual, and constantly evaded. There seemed to be no police whatever; nor any assize of bread; the difference of one half prevailing in the price of the same article in different parts of the same town. One hundred rix-dollars had been paid in the course of the last year for a single load of hay; peasants being actually compelled to kill their cattle, or to sell them for almost nothing, or to feed them with the straw from the tops of their houses.

> We often met the young King in his walks through the streets: it was a practice in which he frequently indulged; going about in the most private manner, wrapped in a drab great coat, and attended only by a single officer, his Master It was understood to be his wish that he of the Horse. should pass without notice, as it would be troublesome to him to be continually bowing to all who might make their obeisance. But as Englishmen, who had experienced in every part of his kingdom the most unbounded hospitality, and were instigated only by a desire to testify the regard we felt for a country of which he was the Sovereign, we could not forego the satisfaction of taking off our hats, whenever he approached; and, notwithstanding what was before urged with regard to his conduct towards our countrymen, it was pleasing to observe that upon these occasions he always returned our salute in the most gracious manner.

The places of Public Amusement in this city are not CHAP. VI. numerous: the principal are, the OPERA House, already Places of Pubnoticed; the THEATRE, or, as it is here called, Dramatiska; ment. and the VAUXHALL, or Gardens of Promenade. The building of the Opera House took place between the years 1776 and 1782. This edifice is two hundred and ten Swedish feet in length, by one hundred and fifty in breadth; and it is fiftyseven feet in height. The front is decorated with columns and pilasters of the Corinthian order. It constitutes the chief ornament of the Nordermalm Square, being opposite to the Palace of the Princess Royal. The Theatre is situate in the Old Arsenal: it was built in 1702, upon the demolition of the Théatre Française, which was taken down in the alterations made to lay open the front of the Royal Palace'. In this theatre are represented the Swedish tragedies, comedies, and farces; the best of which are quite below mediocrity. In comedy, however, the Swedes have some excellent actors. We saw one, whose name we do not recollect, but he reminded us forcibly of our own matchless comedian, John Bannister, whose talents will never be forgotten, if unaffected simplicity of nature, joined with pathos and energy, be preferable to stage tricks, affectation, and caricatura. This actor was deservedly a great favourite with the Swedes, whose stiff and serious features, habitually disposed to gravity, relaxed into continual laughter

⁽¹⁾ The old French theatre is now changed into a set of ante-rooms belonging to this building.

CHAP. VI. laughter the whole time he remained upon the stage. Sweden is not destitute of eminent theatrical writers; but the principal part of the dramatic works brought forward in this country are translations from the English and French languages: this is always the case with their farces, if they possess the smallest degree of merit. The utmost order prevails in their theatres during the representations: no person moves from his seat, or enters into conversation with those about him: if the least sound of a voice be heard, except from the stage, a general hissing immediately puts the intruder to silence.

Academies.

Of the Societies instituted in Stockholm for the encouragement of Literature, there are five which bear the name of Academies, without including the Patriotic Society; viz. The Academy of Sciences; that of the Belle's Lettres, History, and Antiquities; the Swedish Academy; the Academy of Painting and Sculpture; and the Royal Academy of Music. Among these, the ACADEMY OF SCIENCES holds the highest rank. It was founded in 1739, by several learned patriots, among whom it is sufficient to mention the senator Count Hoepken, Linnæus, and Alstroemer. It has continually increased and prospered since its first establishment; having published more than one hundred volumes of Memoirs, Discourses, Eulogies, and Dissertations, all in the Swedish language. It was not until it had attained the summit of its reputation that it was received under the protection of Government; which has since allowed to it great advantages; among others, the exclusive right of publishing and distributing almanacks throughout the kingdom, a privilege

from

from which it derives a revenue annually of two thousand CHAP. VI. rix-dollars. The sciences which chiefly occupy this Academy are, Natural History, Physic, Anatomy, Chemistry, Astronomy, &c. It has a Library, a Cabinet of Natural History, an Observatory, and a Botanic Garden bequeathed to it by Mr. Berguis, the direction of which is entrusted to Mr. Swartz. Cabinet of Natural History is under the inspection of Mr. Sparrman, celebrated for his voyages in the South Seas with Captain Cook, and for his African Travels. This Academy has a President and two Secretaries. The President is renewed every three months: the two Secretaries are perpetual. The first, Mr. Melanderhielm, directs the Academy, and has the Library under his care: he also conducts the foreign correspondence, and publishes the Memoirs. He lives in the Hotel of the Academy, a large and beautiful building in the centre of the town. In the principal chamber is the bust of its founder, Count Hoepken. The other secretary is Astronomer to the Academy: he lives in the Observatory, situate north of the town. He is employed in the publication of almanacks. Since the establishment of the Academy of Sciences, it has experienced some severe losses in the deaths of Messrs. Pilas, De Geer, Wargentin, Baech, Berguis, Scheele, &c.: but it still possesses Mr. Acrel, chief physician; its President, Rosenadler, who has bequeathed to it all his Swedish books; Admiral Chapman; Baron Alstroemer; Mr. Engestroem; Baron Hermelin; Messrs. Geyer and Hjelm, excellent mineralogists and chemists, the latter of whom first obtained Molybdenum in the metallic state; De Carlson, Paykull, Oedmann, Among the members of this Academy, it boasts of &c.

CHAP. VI. many celebrated foreigners:—in France, Lalande, Expilly, Monnet, Keralio, Le Sage, De Morveau, Boufflers, &c.—in Spain, Mutis; __in Italy, Spallanzani, Verri, Morozzo, Fontana, &c.—in Germany, Kästner, Kölpin, Richter, Forster, Möller, Achard, Jacquin, Schreber, Weigel, &c .- in Russia, Æpinas, Euler, Rumowski, Pallas, Kourakin, Razumowski, Gallitzin, &c.—in England, Banks, Pennant, Kirwan, and Smith; in DENMARK, Niebuhr, Suhm, and Vahl; - in AMERICA, The Memoirs of the Academy are translated at Priestley. Venice into Latin, with the title Analecta Transalpina; and at Gottingen in Germany, into French, by Mr. Keralio. principal part of the Library of this Academy was the gift of the President Rosenadler. & Among the books are some typographical rarities; a Swedish Bible, with wood-cuts, printed at Upsala in 1541; the New Testament, in quarto, with wood-cuts, printed at Stockholm in 1549; the first New Testament printed in Sweden, dated Stockholm 1521. Also a rare work (because prohibited), called "The Battles of Duke Charles," or Charles IX. That the proceedings of this Academy should be published only in the Swedish language may be regretted as a real literary loss; for, as it is observed by a late author who visited this country, "Si Linnée avoit écrit dans sa langue, il auroit eu, sans doute, autant de mérite; mais, à coup sûr, pas autant de célébrité'." Sparmann added greatly to the Cabinet of this Academy. He classed it according to the system of Linnæus; giving to the Academy, at their sittings, his own descriptions of every thing that

⁽¹⁾ Voyage de Deux Français, tom. II. p. 74 (Note). Paris, 1796.

that was new. Notwithstanding these additions, there is not CHAP. VI. much in this cabinet which can be considered either as worth seeing or describing. We visited it; and were quite struck with its insignificance, and the bad taste shewn in the selection and manner of displaying the specimens. Generally, in the first view one has of a Museum of this kind, merely by casting a glance over it; a tolerable correct notion may be formed of the style and character of the exhibition. Under this impression, we did not expect to be very highly gratified, when we observed, upon entering the apartment, some miserable specimens of common Coral, placed in a row upon pedestals of wretched shell-work that would have degraded the China closet of an ignorant old woman. The eye is afterwards caught by a number of glass-cases, containing organic bodies preserved in alcohol, which are, for the most part, reptiles; serpents, lizards, toads, and frogs. · Here, among the more remarkable rarities, we were shewn the generative organs of the Ostrich and Rhinoceros; the Draco-volans, not so large as a common Bat; the tectus of a Hottentot; specimens of the Rana typhonia, and Rana paradoxa, from the embryo to the perfect state of the animal; Lucerta Amboinensis, considered a great rarity; Venomous Serpents of America, the Indies, and South Seas, remarkable for the flatness of their heads; Flying Fishes of the Red Sea; Worms, Scorpions, and other insects in great number; bones, teeth, &c. of Elephants; and weapons, dresses, and idols of the Islands of Australasia. Around the room are ranged specimens of greater magnitude; as, the heads of the Cape Buffalo; the Hippopotamus, believed to be the Behemoth of sacred Scripture;

CHAP. VI. Scripture; the horns of various animals, some of astonishing size, of the Rein-deer, Elk, &c.

The Academy of Belles Lettres was much patronized by Gustavus the Third; who not only endowed it with a fund for prizes, but also for allowing premiums to several of its members. Its province extends to Foreign Literature and Classical Antiquities. The number of its members is limited to fifty. It was founded in 1753, by Queen Louisa Ulrica. Within these few years, it has lost many men of great merit; as, Dalin, Lagerbring, D'Ihre, Potberg, and De Berch. Its secretary is Mr. Tileman, Royal Antiquarian. This Academy has published several volumes of Memoirs, in Swedish. It possesses a beautiful collection of medals.

The third, the Swedish Academy, or the Academy of Eighteen, is so called from the number of its members. It was instituted for the cultivation of the Swedish language, by Gustavus the Third, in 1786. Its particular aim is to cultivate, to purify, and to enrich the Swedish language. It composes the eulogies of Kings, noblemen, and private men who have been celebrated. It has published many volumes, on these and other subjects. Gustavis the Third neglected nothing that might conduce to its welfare. Since the year 1702, it has enjoyed the exclusive privilege of publishing the Swedish Gazette. Its secretary is Mr. Rosenstein, late preceptor of Gustavus the Fourth. It is usual, upon the death of one of its members, to deliver a funeral oration, illustrating his merits, enumerating his writings, and pronouncing his eulogium. This ceremony is always attended by the Academicians in their full dress,

by the members of the Royal Family, the Nobles and CHAP. VI. Gentry of Stockholm, and Foreigners admitted with tickets distributed by the members of the Academy. We were present upon one of these occasions, Saturday, November 23, when the sitting was attended with a great degree of grandeur. It was upon the death of Mr. Stenhammar. We arrived in the evening, and found the chamber of the Academy illuminated by a profusion of candles suspended in heavy chandeliers of cut glass. Upon the right hand, as we entered, in boxes affixed to the wall, sate the King and his Court; his Majesty, with the male part of his suite of attendants, being in one of the boxes; and the Duchess of Sudermania, with her maids of honour, in the other. The seats on the opposite side were filled with Noblemen, Ambassadors, Peeresses, and Foreigners of distinction. In the middle of the assembly, and below the King's box, was a long table, at which were placed the members of the Academy. The rest of the apartment was crowded by military officers and the sons of the principal families of Stockholm, all in full dress or in uniform. The business of the sitting opened with a Congratulatory Poem addressed to the King, by Mr. Leopold, the most celebrated of the Swedish Boets, upon the birth of the young Prince; containing, as may be easily supposed, little more than the most extravagant adulation, disposed into metre and rhyme. After this had been read, a new member, Count Fleming, was introduced, to fill the vacancy caused by the death of Stenhammar, and to pronounce VOL. VI. KK

CHAP. VI. pronounce the funeral oration'. This was read by the Count, from a manuscript, in the Swedish language, written in a terse and elegant style, with great uniformity of diction, but highly polished; and it gave general satisfaction. The reading lasted a considerable time. When it was over, his Majesty advanced towards the Duchess of Sudermania, and kissed her before all the company present; a ceremony which, as was before remarked, very generally attends the breaking up of assemblies in Sweden.

> The Academy of Painting and Sculpture was founded in 1735, by Count Tessin. It was particularly protected by Gustavus the Third, who, in 1783, enlarged and perfected the plan of its establishment by new regulations. It publishes every year an exposition of its works, and distributes prizes among its pupils. Of this Academy, Mr. Fredenheim is President, and Mr. Pasch Director; the first, Intendant of the King's Buildings; the second, Keeper of the King's Pictures. Among its members, it boasts of the celebrated Sergell, one of the greatest sculptors in Europe. The other most distinguished members of this Academy are, Mr. Breda, the portrait-painter; Mr. Templeman, the Secretary, and Architect to the King; Mr. Masrelier, Painter to the King; the famous

Despres,

⁽¹⁾ Acerbi has mentioned a Swedish bon-mot, upon the occasion of Count Fleming's being introduced as the new member of the Academy of Eighteen; which will shew the natural sprightliness and wit of the Swedes, notwithstanding the character of gravity often imputed to them. When the Count took his seat among the Academicians, a wag observed that their number now amounted exactly to 170. 'How so?' it was asked. 'Because,' replied he, 'when a cipher is added to the number seventeen, the amount is 170.' -See Acerbi's Travels, vol. I. p. 170. Lond. 1802.

Despres, scene-painter, &c.; the two Martins, one a land- CHAP. VI. scape painter, the other an engraver and painter in watercolours. It has lost Mr. Gillberg, who produced the medals which compose the medallic history of Gustavus the Third.

The ROYAL ACADEMY OF MUSIC was founded in 1772, by Gustavus the Third. The Opera is annexed to its establishment. It has produced works of great merit, in poetry, music, and scenery: for example, the famous opera of Gustavus Vasa, which was brought out with unequalled splendour and perfection. The music of its pieces is principally composed by Uttini, an Italian; and by Vogler and Kraus, who are Germans.

The Patriotic Society began to assemble in 1767, and is numerous as to its members. It is chiefly occupied in the science of Economy, as applied to the kingdom: it publishes annually works upon this subject. Its principal secretary is Mr. Modur, who may be considered as its founder. This society is truly useful to the Swedish nation.

On Saturday, December 7th, the King left Stockholm, for Upsala, in consequence of a petition he received, as Chancellor of the University, from the Students remonstrating against the conduct of the Rector Magnificus, and demanding a legal inquiry into the propriety of the measures he had thought proper to pursue. These young men had celebrated Riots at Buonaparte's return to Paris; and exhibited an ideot, in solemn procession, dressed and decorated with the uniform, orders, and insignia of Suwarof. The principal magistrate

of

CHAP. VI. of the University had therefore assembled the students, and publickly reproved them for their conduct. In consequence of this disgrace, which they conceived they had not merited, the appeal had been made to the King. Upon receiving this petition, his Majesty immediately repaired to Upsala; and having satisfied himself of the irregular behaviour of a parcel of unruly boys, made it known to the members of the University that he did not deem them any longer worthy either of his patronage or protection, and accordingly resigned the Chancellorship. This was one of those measures, for which, having acted from the impulse of his own heart, and consulting the advice of no one able to guide him, he was universally blamed in Stockholm: it was said, that it might tend to the ruin of the University. To an impartial bystander, the King's only error seemed to be in having at all noticed an application of so puerile a nature, and wone that he might so easily have dismissed, by referring the whole affair to the resident magistrate. But so determined was he to adopt his own judgment in all things, that if any of his Ministers had the reputation of influencing his actions, it was made a sufficient ground for their immediate dismissal.

Royal Palace.

We availed ourselves of his absence, upon this occasion, to pay a visit to the ROYAL PALACE; strangers not being admitted, during his residence, into the State apartments. This magnificent structure is one of the finest modern edifices of the kind in Europe. It is not so spacious as the Royal Palace of Copenhagen, but it has a grander aspect, being upon an eminence which commands all parts of the city. It is of a square form, built four stories high, of brick-work, faced

with

with stucco after the Italian manner, and adorned with CHAP. VI. Grecian pillars and pilasters. The interior court measures about eighty-seven paces by seventy-five. A marble staircase leads to the Chapel, which is surrounded by a gallery, and beautifully decorated. Opposite the Chapel is the Council-chamber, in which we saw two fine portraits by an unknown artist; one of Gustavus Vasa, executed in black drapery; and another of Gustavus Adolphus. These are whole lengths; but they have been stretched upon new canvas since they were originally painted, by which means the back-ground has in each instance been enlarged, and the original design of the painter extended with marvellous success; the harmony and due effect not being at all violated, which is very unusual in such cases. The State apartments consist of a suite of chambers, the first of which, of a square form, is ornamented with gilded columns. Here there are two. statues as large as life, by the famous Sergell, who was at this time resident in Stockholm, afflicted, as it was said, with an incurable melancholy: the one is a statue of Apollo, the other of Venus; the head of the latter being a portrait of the Countess Hoepken. Passing on, we entered another grand chamber, furnished with rich French velvet; in which were six marble busts, also by Sergell, representing the Family of Gustavus the Third. After this occurred a small Cabinet, serving as a kind of vestibule to the Picture Gallery, containing an antique marble bason, supported by a tripod of lion's feet,

⁽¹⁾ See the Plate facing p. 152, in the former Volume.

⁽²⁾ Voyage de Deux Français, tom. II. p. 54.

Picture Gallery.

CHAP. VI. feet, and three antient marble statues—Juno, Pescennius Niger, and A Youth with a Swan holding in its beak a serpent. The Picture Gallery contains some fine pieces; but in the examination of this collection, we thought that the number of copies exceeded the original pictures in the proportion of ten to one. It was principally formed by Gustavus the Third, during his travels in Italy; and any one who has resided in that country will figure to himself the traffic that would be going on when a young Prince, passionately fond of the arts, and liberal in his disposition, arrived among the Ciceroni and dealers at Rome. It is not wonderful that he should have brought away with him more trash than most of our English nobility journeying as amateurs. In viewing this collection, it was easy to recognize the decisive marks of a system of imposition, and some articles of manufacture, which have continued for many years to exercise the ingenuity of the Italian artists, and to dupe the credulous foreigners by whom they are visited.—In this gallery is a picture of The death of Adonis, attributed to Vandyke, which is assuredly a copy'. Others, said to be by Bassano, which are also copies. attributed to Leander da Ponte, seemed to be really by that master. A picture of Sigismund, king of Sweden and Poland, on horseback, with a dog, in the manner of Vandyke, is shewn as a picture painted by Rubens, Vandyke, and Sneyders: it was bought at a common posthouse, for a single ducat. Of this picture it is usually said.

⁽¹⁾ The Authors of the Voyage de Deux Français ascribe this picture to Le Moine. See tom. II. p. 55.

said, that the figure of Sigismund is by Vandyke, the horse CHAP. VI. by Rubens, and the dog by Sneyders. Here are many pleasing and highly-finished Flemish pictures; and among others, some of Wouvermans: also a masterly picture by Rembrandt, of a Philosopher reading. A Butcher cutting up an ox; said to be by Teniers; doubtful. The Family of Rubens, by Vandyke. Besides these, are works attributed to Poussin, Berghem, Holbein, Titian, Lanfranc, and Simon da Pesaro, which it would be tedious to enumerate. In the same gallery, moreover, are thirteen antique marble statues, some of which may justly rank among the finest reliques of antient art. In other parts of this stately palace are many other pictures and statues; among the latter, a small statue of A cumbent Fawn, one of the finest works of Sergell. We were conducted from this Gallery to the private apartments of the King, Private Cabiand much interested in viewing the elegant suite of small vue the Thind. rooms in which Gustavus the Third exercised a taste of which he was vain, in shewing how much it was possible to contrive within a narrow compass. This was what he used to call his Multum in parvo. Master of a palace vast enough to accommodate all the Sovereigns in Europe, he would creep into closets, in order to convince his friends how snug, convenient, and withal how elegant, a room might be made, in which the head of a tall man would touch the cieling, and his arms, when extended, the side walls. It was with this view he used to retire to his little chambers in the Opera House, where he would frequently lodge; quitting a palace like Hadrian's Villa, to dwell in Diogenes' tub.—At the end of a series of such small cabinets which were once occupied by

him

CHAP. VI. him in this palace, we were shewn an elegant boudoir, or closet for writing; the table being raised, and adapted to a rich couch surrounding the apartment. The doors of all the rooms leading to this boudoir being placed in a straight line, and glazed, enabled the King, as he sat, to view the whole extent of these chambers, and the persons of all who might be in them, even when the doors were shut.



IGNEOUS BASALT, from the Bottom of a Copper Furnace in Schema.

The briginal Specimen in the possession of the King of Sweden.

CHAP. VII.

STOCKHOLM.

Public Women—Mildness of the Season—Vauxhall—Watchmen—Balls of the Society—Manners of the Inhabitants—Public Executions—Artists—Royal Palaces—Views of Stockholm—Description of Drottningholm—Lake Mœlar—Sudden Change induced by the coming of Winter—Frozen Game—Population—State of Trade—Boot and Shoe Market—Cabinet of Models—College of Mines—Igneous Basalt—Apparel worn by Charles the Twelfth when he was assassinated—Cast of that King's face after death—Royal Library Vol. VI.

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Public Women.

Mildness of the Season.

Vauxhall.

CHAP. VII. THE streets of Stockholm are not paved for foot-passengers; neither do they swarm with prostitutes, like the public streets of London. Women of this description are, however, not the less numerous here, for being less public in their During the month of November we were appearance. surprised at the mildness of the temperature; the thermometer of Fahrenheit, towards the latter end of the month, varying from 40 to 44 degrees, when we had expected that we should have been going about in sledges upon the snow. We went to what are called the Vauxhall Gardens, upon Sunday, November 17, after visiting the Theatre, which we found more than usually dull. These gardens have but little resemblance to those in England, whence their name has been borrowed: a few rows of trees, and a narrow room for walking or dancing, about eighty yards in length, make up the whole. This room is lighted by lustres of cut glass. In a gallery upon the left was a band of musicians, who played during the evening, from six to ten, when a trumpet sounded for the company to disperse. The principal part of the persons present were women of the class before mentioned: the company, consequently, with the exception of several officers of the army, being of the lower orders.

We were a good deal amused by the grotesque appearance CHAP. VII. of the watchmen, in the streets at night. Their dress consists entirely of the skins of animals; and they walk in pairs, carrying in their hands a curious instrument for seizing culprits who may endeavour to make their escape from them. It is so contrived as to shut fast about the neck. being applied below the back part of the head; and becoming tighter, the more a person struggles to get free. When once, therefore, this instrument is fixed, the prisoner is sure to remain quiet, through fear of being choked: afterwards, it opens with a spring. Perhaps this portable trap, or thief-collar, might be made useful in our own country, to aid the apprehension of midnight robbers by the police of our metropolis: and we are quite sure, that it is more wanted in London than in Stockholm, where all the watchmen have to do, is, to carry about their rattle-spikes, with these instruments, calling the hour in the same dismal ditty which is heard all over Sweden'-

Watchmen.

Klockan är tie slagen!-Fran eld, och brand, Och fienden's hand, Bevara, O Gud! den stad och land!-Klockan är tie slagen!

As a contrast to the scene exhibited by their Vauxhall, where.

The clock has struck ten !--From fire, and burning (fire-brand), And from the enemies' hand, Save, O God! this town and land!-The clock has struck ten!

⁽¹⁾ The author finds this preserved in the MS. Journal of his friend Dr. Fiott Lee. It is thus, when literally translated:

Balls of the Society.

where, however, there is nothing of rudeness or disorder,--a stranger finds in the balls of the Society the utmost degree of elegance and the most polished manners. We accompanied Baron Oxenstierna, with Messrs. Acerbi and Bellotti, and our friends Messrs. Kent and Jarrett, to one of those balls. The preceding day, November 25, had been a great day at Court, and most of the principal personages were present upon this occasion. We were much struck with the magnificence of the assembly. The dancing began with quadrilles; after which the company joined in what they called the long dance; that is to say, one of our English country-dances: the whole was then concluded with a waltz, when they all adjourned to the supper-rooms. There were three rooms for supper; two ball-rooms; and two other apartments for cards—a very favourite amuse ment with all the Swedes. This entertainment lasted until near five o'clock in the following morning.

From all that we had seen of Sweden, we found much more to admire than to disapprove, and very little to censure: the generality of Englishmen visiting the country will probably coincide in this opinion. The more we became acquainted with the inhabitants, the better we were pleased with them. There are few places where the traveller will find a greater facility of intimate intercourse with the different families than in Stockholm: for although the hospitality he may experience be not of that unbounded nature which distinguishes the natives at a distance from the capital, it is on this account less oppressive, and more according to the rules of refinement. The time of paying

Manners of the Inhabitants.

and receiving visits is in the evening: it begins about five CHAP. VII. o'clock. Having been once introduced, no invitation is afterwards necessary. As no visits are made in a morning, every one makes his appearance dressed for the evening parties. They occur in several houses, at each of which it is usual to stay half or three quarters of an hour. At these parties the amusements are, music, singing, cards, and dancing. The conversation is always, lively, and generally remarkable for the good humour and mirth which is excited.

Public executions, always rare in the provinces, are not Public common in the capital. During our residence in Stockholm an event of this kind took place. Two malefactors, condemned for forging the paper money, were hanged. The concourse of people, to see these men executed, exceeded any we had ever observed elsewhere, upon a similar occasion. For some hours before the sentence of the law was enforced, the streets of the city-leading to the place of execution were . full of passengers, moving towards the spot. This is situate in a forest, about three English miles from Stockholm. The lower part of the gibbet was surrounded by a circular wall, concealing the executioners from view, and leaving only the top of the gallows visible. About nine o'clock in the morning the two culprits were conducted from their prison to this place. The rocks and hills around were covered with spectators, and the throng in the road was so great that carriages could not approach. The two malefactors, after being allowed to halt (as is usual in such cases) at a small cabaret, to drink a glass of wine, were brought to the outside

CHAP. VII. outside of the circular wall at the foot of the gibbet. Two ropes appeared above this wall, hanging from the beam. the door which opened into the interior area, the secretary of the police read to the two criminals the sentence which had been pronounced against them; after which they were ushered in. About five minutes had elapsed, after their entrance, when the ropes began to be in motion. The executioner at the same time made his appearance, having ascended a ladder placed against the beam of the gibbet. Immediately one of the criminals was drawn up by a rope fastened round his waist, and exposed to view, with his hands bound behind him, his eyes covered, and his head and legs hanging down. A short rope was fastened to his neck, with a loop, which the executioner attached to an iron hook in the beam; and then, letting go the rope by which he had been drawn up, and placing his foot upon the criminal's head, his neck was instantly broken. The other malefactor suffered in the same way.

These unfortunate men were remarkably well dressed, and seemed to have paid an attention to their persons which is very remarkable at such an awful moment. One of them had served as a serjeant in the provincial cavalry, of which the Duke of Sudermania was colonel. His melancholy fate seemed to interest and affect the spectators, many of whom were in tears. As he was drawn up, his voice was heard uttering, several times, these words:—

"Gud bevara min själ! min själ!"

"God save my soul! my soul!"

We remained in Stockholm during a considerable part of the months of November and December, having no reason to complain either of the climate or of the inhabitants. Indeed, when we considered the latitude of the place, it seemed as if winter had postponed its annual visit.

In a former volume we mentioned some of the artists Artists. of this city. Towards the end of November we were occupied in renewing our visits to them, and also in inspecting the works of others. A painter, Mr. Breda, late pupil of Sir Joshua Reynolds, was engaged in painting a wholelength portrait of the King, who sate to him every day. This portrait was a very fine one, and a striking likeness of his Majesty. Mr Breda had a valuable cabinet of pictures of the old Masters, which had been formed by his father. At an engraver's of the name of Martin, brother of the landscape-painter of that name, whom we before mentioned, we procured many views of the mines and of the city, some of which have been engraved for this work. We visited that eccentric genius Després, a painter brought from Italy by the late King; and saw several fine pictures, the works of his hand. Being admitted into the workshop of the celebrated Sergell, we saw the colossal bronze statue of Gustavus the Third, ordered by the citizens of Stockholm, for a pedestal of polished, porphyry, which was already placed upon the Quay, a little to the east of the Palace. Sergell is considered as second only to Canova, in the art of sculpture. This bronze statue represents the King as a pedestrian figure, dressed in a long mantle, in the act of haranguing his troops. It is eleven feet high. The right hand

CHAP. VII. hand is raised and extended, holding an olive-branch. The modelling cost 10,000 rix-dollars; the casting and metal, 20,000. We saw a valuable collection of designs, books, and casts, at the house of Masrelier, whose own drawings are deservedly in high estimation. Upon the 28th of November we were invited by Baron Oxenstierna to a dinner, at which we met all our English friends. In the evening, Signor Acerbi, who was present, amused the company by the exhibition of his musical talents; performing upon the harpsichord a great variety of national airs, to which, with surprising facility, he adapted the most skilful and pleasing variations.

Upon Friday the 6th of December, we set out to visit Royal Palaces. Drottningholm, one of the royal palaces in the neighbour-The name of this place, when translated, signifies The Queen's Island: it is situate in an island upon the borders of the Lake Mælar, about six English miles from Stockholm. As a place of summer residence, nothing can be more delightful. There are two other palaces belonging to the King in the environs—Gripsholm and Stromsholm; but this by far exceeds the others in beauty, and has generally been preferred by the Royal Family. The view of Stockholm from the bridge, in going to Drottningholm, is the best: and if external appearance alone were to be relied on, this might be deemed the most magnificent city in the world. the effect produced is not to be described in words: the aid of the painter is here wanted'. White edifices, consisting

Views of Stockholm.

of

^{. (1)} There cannot be a better subject for a Panorama than a View of Stockholm, connected as the different objects are with many interesting events in History. If the ingenious

of public and private palaces, churches, and other build- CHAP. VII. ings, rising from an expanse of waters, produce an effect Description of incomparable grandeur. The approach to Dröttning- holm. holm is by a floating-bridge, seven hundred feet in length. This bridge, they say, was finished in twenty-two days; and cost five thousand rix-dollars: it is constructed entirely of wood. The palace is a handsome stuccoed building, roofed with copper, with side wings; and has at either extremity a pavilion, surmounted by a dome, one of which is the chapel. The length of the whole building seemed to be about forty yards. We went first into the chapel, which is small, and perfectly simple. Then we took a walk round the gardens, which we found barbarously laid out, in the old style, with shorn trees and clipped hedges. We were conducted to a Theatre formed in this wretched taste, by means of avenues. We soon saw enough to convince us that nature had done every thing for Dröttningholm, and man worse than nothing. In the reign of Gustavus the Third this place partook largely of the splendour that characterized his reign: the sum of money expended in its decorations was enormous. Its interior exhibits a very different aspect now, from its appearance then. The Library and some of the rooms are worth seeing;

ingenious artist, to whom the public has been indebted for so many excellent pictures of this kind, should pursue the hint here suggested, he will probably select, for his point of view, the little hill upon which the Observatory stands, or else the tower of St. Catherine's Church; whence the eye commands, not only the whole of this remarkable city, intersected with all its bays, creeks, and harbours, but also the numerous little islands, with all the principal squares, streets, palaces, churches, and country-seats.

CHAP. VII. seeing; but, upon the whole, there was nothing to detain us long. A noble statue of Neptune, in bronze, upon the border of the lake and in front of the Palace, has been disposed so as to produce a very striking effect. It is a common thing to decry works of this kind, as they are generally seen in public gardens-leaden Mercuries, spouting dolphins, and dancing Cupids; but the appearance of this fine statue, extending its arm over waters connected with the ocean, and exhibiting a masterly style of sculpture, is truly majestic. All the bronze figures exhibited here were taken at Prague, in the Thirty-years' war. Upon a vase may be observed the cipher of Ferdinand the Second. These works are, for the most part, in the style of the Florentine school, in which the German artists used at that time to study. We now returned to the Palace itself, and were conducted to the Library. Upon the tables we saw a number of small specimens of sculpture, executed at Florence, in gypsous alabaster. Here are also a number of those beautiful terra-cottas commonly called Etruscan vases; some of these were of great value: and a collection of medals of the highest price, containing those of antient Greece and Rome; together with a regular series of every thing rare and remarkable in the Swedish coinage. This collection is contained in eight cabinets. Besides a wellchosen collection of books, there are, in this library, Flemish, Dutch, and Italian paintings; and models, in cork, of the antiquities of Italy. There is, moreover, a curious Cabinet of Natural History, which belonged to the late Queen, and was described by Linnæus. Here we saw, among many other

other curious animals preserved in alcohol, the embryo CHAP. VII. of an elephant; together with apes, birds, amphibious animals, fishes, insects, and shells, many of the greatest rarity and beauty. There are few things in this palace more worth a stranger's notice than a View of Stockholm by Martin, one of the best works of that artist. The Audience-chamber is filled with allegorical pictures, alluding to the history of Sweden, principally in the time of Charles the Eleventh, painted by Ehrenstrale. The Gallery contains a series of large pictures, representing the battles of Charles the Tenth. The grand staircase is ornamented with marble statues, all of which are modern. We saw, above stairs, a most excellent portrait of Charles the Twelfth; and some good pictures of his most celebrated Generals, by Raft. Opposite the palace is the Theatre; and there are several adjoining houses, for the members of the Court in attendance upon the Royal Family.

The Lake Mælar, with its irregular shores and numerous Lake Mælar. islands, has all the variety and beauty that rocks, woods, and verdant spots without great height can give; and the views towards Stockholm, especially if seen from the water, are singularly pleasing. The immediate boundaries of the water are generally rocks of gneiss, and the shores consequently bold and denuded. The trees are chiefly firs; but birch, alder, and oak, are not unfrequent. The approach to Stockholm was described in a former Volume, both from our own testimony, and also from the MS. Journal of the late Rev. E. V. Blomfield, as affording no idea of the entrance

CHAP. VII. to a great capital: but if it be approached from the side of Dröttningholm, or from the Glass-works, no city in Europe can pretend to vie with it:—it seems a Cyclopéan heap of the most noble structures; palaces and churches all piled one above another; and the whole floating, as it were, upon the broad bosom of the deep. This magnificent scene is further enlivened and rendered more enchanting by the appearance of vessels of all sizes; some sailing, others riding at their anchorage amidst the rocks and groves, or beneath the very windows of those lofty buildings. Nor does this prospect become less delightful when the lake and the sea is frozen; because then they are covered by sledges of all kinds, and exhibit one of the gayest scenes imaginable. The coming of winter opens for the Swedes, as among the Norwegians, the heyday of the year. When the snow has fallen, every body is in motion, and the most lively intercourse prevails: business seems to awake as from a slumber, and all is cheerfulness and industry. The return of this winterly festival was first announced to us by a custom which reminded us of good old times in England: parties of boys, attended by bands of music, came to sing carols at our door. This began with the month of December. Fahrenheit's thermometer was at 28° upon the second day of the month; but it was not until the 8th that the mercury remained steadily below the freezing point. After the 12th, however, it was observed every day to fall gradually lower: the air was then clear and dry, and we felt none of that chilliness which arises from a damp atmosphere when freezing is about to take place.

As soon as the frost had fairly set in, Game of all sorts became chap. VII. abundant, and was seen upon stalls in the principal streets. Frozen Game. This being frozen, the poulterers are under no apprehension of its becoming stale. The heaps of curious birds, in their beautiful plumage, afforded to us a very interesting sight. As the frost had commenced earlier in the more northern districts, a short time only elapsed before we saw immense sledges arrive, bringing every species of wild fowl, and from the most distant provinces, piled in heaps, like so many stones. We sent the skins of many of them to England: and a visit to the Game-stalls, as to a cabinet of natural history, became to us a pleasing amusement. The prices in the beginning of December, for Game and other articles, were as follow:

other wild-fowl, &c. in proportion. These prices appeared to us to be very high, considering the abundance of Game everywhere displayed; and it was expected they would not be lowered during the present month. The inns in Stockholm are very dear, and very bad. The best plan is, to hire lodgings; but for these, if tolerably neat, a traveller will have to pay two dollars a day; besides one dollar a day for fuel, which till lately was never made an article of charge. For breakfast of tea and bread and butter,

CHAP. VII. the price is half a dollar each person; and two dollars a head are demanded for the most common dinner, not including wine.

In reading a list of all the tradesmen and artificers in Stockholm, a stranger might hastily conclude that a great deal of business and many manufactures were going on. The same opinion might be formed by visiting the Exchange, situate in the great market-place, south of the Palace, between one and two o'clock. Here the throng is so great, that it is difficult to force a way through the crowd. The number of inhabitants in the whole city is estimated at something less than the population of the city of Bristol: it amounts to 72,652. In this number there were, at this time, thirty-six wigmakers, and only one cutler! forty-seven vintners, and not a single chimney-sweeper! nineteen coffee-roasters, although coffee had been prohibited! and only nine copper-smiths! seventy goldsmiths and jewellers, and only four braziers! one hundred and thirteen keepers of ordinaries, and only one We could find nothing good that had tool-grinder! been manufactured in the country, excepting iron, tar, and gloves. The gloves of Scania are the best in the world; but all other articles were of inferior quality, unless they had been imported from England, in which case they were considered as contraband, and were sold at immense prices, and in a clandestine manner. The glass-works were all bad:

Population.

State of Trade.

makers;

the same may be said of all the works of joiners and cabinet-

⁽¹⁾ See also Thomson's Travels in Sweden, p. 94. Lond. 1813.

makers; cloth, leather, &c. &c.: yet one of the most singular CHAP. VII. sights in Stockholm is the boot and shoe market: this is a Boot and Shoe building near the Palace, to which there is an ascent by a flight of stairs, where ready-made boots and shoes are sold very cheap; and were it not for the inferiority of the leather, and the negligence shewn in the work, boots are no where better made. The astonishing quantity exposed for sale in this market is really worth a visit to the place: it is a kind of gallery, filled with stalls, and attended by women. With regard to other articles of trade, the inferiority of the Swedish workmanship, and in many instances the total want of the article itself, is very striking. A whole day may be lost in inquiring for the most common necessaries. Of all things for which a traveller may have need, we thought that furs might be obtained here in the greatest perfection, and at the most reasonable prices; but even this branch of trade seemed to be almost a monopoly in the hands of the English. The best furs were all imported from England, and came, as it was said, originally from America; consequently the prices were very high, and the articles rare. All optical instruments were the wares of those vagrant Italians from the Milanese territory, whom we have before described as wandering with the proofs of their industry and ingenuity in every part of Europe.

It is difficult to reconcile this want of manufactures with the inventive genius shewn by the Swedes in one of the most pleasing of the public exhibitions of their capital,—that of the Cabinet of Models. This cabinet is preserved in an Cabinet of antient palace, where the courts of justice are now held, near Riddarholm

CHAP. VII. Riddarholm Church. As a repository of the models of all kinds of mechanical contrivances, it is the most complete collection that is known. We went several times to view it; and would gladly have brought to England specimens of the many useful inventions there shewn'. In this chamber, it is not only the number of the models that strikes the spectator, but their great beauty and the exquisite perfection of the workmanship, added to the neatness with which they are arranged and displayed. Every thing necessary to illustrate the art of agriculture in Sweden may be here studied; models of all the ploughs used in all the provinces from Smoland to Lapland; machines for chopping straw, for cutting turf to cover houses, for sawing timber, for tearing up the roots of trees in the forests, and for draining land; stoves for warming apartments, and for drying all sorts of fruit; machines for threshing corn; corn-racks; windmills; pumps; all sorts of mining apparatus; fishing-tackle; nets; fire-ladders; beds and chairs for the sick; in short, models of almost every mechanical aid requisite for the comforts and necessaries of life, within doors or without.—There can be no doubt but that patents would be required for some of them, if they were known in England: and possibly patents may have been granted for inventions that were borrowed from the models in this chamber. Among them are models for light-houses, telegraphs, and other methods of making signals.

Upon

⁽¹⁾ Mr. Cripps succeeded in purchasing copies of some of them; such as, a machine upon an improved plan for denchering land; and models of some of the Swedish stoves for heating apartments.

Upon this our second visit to Stockholm, we again examined CHAP. VII. the collection of minerals belonging to the Crown; and were college of much indebted to the celebrated chemist Hielm, for the readiness he always shewed to gratify our curiosity; allowing us to inspect all the produce of the Swedish mines. The refractory nature of some of the richest iron ores of this country and of Lapland is owing to the presence of several remarkable extraneous bodies; among which may be mentioned titanium, zircon, and phosphate of lime'. We had made a large collection of these ores, and the nature of them is now well ascertained. In the account we gave of our first visit to this collection, a specimen was slightly alluded to, exhibiting a remarkable prismatic configuration, taken from the bottom of a furnace in Siberia. How it was brought to Stockholm we did not learn. Some of the Swedish mineralogists attached more importance to this artificial appearance than we did; considering it as a satisfactory elucidation of the origin of what is commonly called the basaltic formation by means of igneous fusion. We caused Igneous an accurate drawing to be made of it, by Martin, which has been engraved as a Vignette to this Chapter. By this it will appear, that the prismatic form which the mass assumed in cooling after fusion, can hardly be considered as

charac-

⁽²⁾ The last was discovered by Dr. Wollaston, in some of the iran ore which was brought from Lapland. Zircon was discovered in iron ore by Mr. Swedenstierna of Stockholm. (See Thomson's Trav. in Sweden, p. 105. Lond. 1813.) In some of the specimens of the iron ore of Gellivara, crystals of zircon might be discerned.

⁽³⁾ See p. 165 of the former Volume.

⁽⁴⁾ See the Vignette.

CHAP. VII. characterized by that regularity of structure which belongs to basalt; that is to say, to those rocks in which hornblende, forming a predominant ingredient, generally occasions a much nearer approach to crystallization: nor would the subject have been again introduced, were it not for the contending theories which prevail respecting the origin of rocks exhibiting a prismatic structure, and the proofs urged to demonstrate that basalt has sustained the igneous fusion. Persons who maintain this opinion, will find, in this solitary example, something calculated to support their favourite hypothesis.

Apparel worn by Charles the Twelfth when he was assassinated.

The hat and clothes worn by Charles the Twelfth when he was shot in the trenches before Frederickshall are preserved in the Arsenal, in the north suburb, precisely in the state in which they were taken from the King's body after his assassination. That he was really assassinated, seems so clear, that it is marvellous any doubt should be entertained

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⁽¹⁾ Some of these proofs, it must be owned, have been strangely defective. A very principal one was this; that coal, lying in contact with basalt, had, by the heat of the melted basalt, been converted into coak. It happened to the author to be permitted to examine a series of specimens of this supposed coak: they were preserved in a very celebrated collection, and arranged in a regular order, from the state of the natural and unaltered pit-coal, through all the changes which the mineral had been said to have sustained, of incipient and more perfect calcination, until it appeared as a scoriaceous body, deprived, it was maintained, of its bituminous and volatile ingredients, in which state it was denominated coak. To this last substance the author's attention was particularly directed. Being permitted to examine and to analyze it, he found that its scoriaceous and porous texture was entirely owing to a number of little cavities which had been occupied by a granular carbonate of lime; a notable quantity of which was still disseminated throughout the mass, but which had undergone no calcination: it effervesced in acids, as usual; and lime was precipitated from its solution.

as to the fact; and yet, with a view to ascertain the truth CHAP. VII. as to the manner of his death, every succeeding sovereign has thought it right to open his sepulchre, and to inspect his embalmed remains. The other curiosities contained also in the arsenal are, the skin of a horse upon which Gustavus Adolphus rode at the battle of Lutzen; a boat built by Peter the Great at Sardam in Holland, taken by the Swedes while on its way to Petersburgh; a number of trophies taken by Charles the Twelfth, from the Russians, the Poles, and the Danes; also the dress worn by Gustavus the Third at the time of his assassination, and his image in wax, which we before noticed. Our main object, upon this occasion, was to see once more the clothes worn by Charles the Twelfth at the time of his death, as connected with a few observations which we had made respecting that event, and which we shall presently state. The coat is a plain blue uniform, with large brass buttons, like that of a common soldier; the gloves are of buff leather, and reached almost up to the elbow; the righthand glove is a good deal stained with blood', and so is a buff belt which he wore round his body. The hat seems to have been slightly grazed by the ball in that part which immediately covered his temple; but there was nothing in its appearance which could throw any light upon the nature of the wound that was inflicted; that is to say, whether it had been thus grazed by a ball entering in, or going out. The

(2) See former Volume, p. 157.

⁽³⁾ Mr. Coxe, who mentions this circumstance, considers it as probable that the King, "upon receiving the shot, instantly applied his right hand to the wound in his temple, and then to his aword."—See Trav. into Sweden, p. 352. Lond. 1784.

CHAP. VII. The appearance of the scull, after the King's death, satis-

factorily proved that the wound in the temple was made by a ball going out. Was it to be believed that a ball from the enemies' works, at the distance the King stood, would have either taken the direction of that by which he was shot, or that it would have passed entirely through the scull on both sides? Mr. Fredenheim, Knight of the Polar Star, President of the Academy of Painting and Sculpture, distinguished by his travels and historical collections, and High Steward of all the Royal Cabinets, had, at this time, the care of the matrice moulded upon the King's face soon after he was killed. Owing to his kindness, and that of Mr. Breda, to whom Gustavus the Fourth came daily to sit for his portrait, permission was obtained for us to have a Cast taken from this matrice: it is now deposited in the University Library at Cambridge. From the appearance of this Cast, all dispute must cease as to the nature of the shot which caused the King's death; which, in the account of that event published by order of the Swedish Government, was said to have been a ball from a falconet'. Voltaire, also, in his anxiety to do away the imputation that had fallen upon his countryman, Siquier, insists upon it that the ball was too large for the calibre of a pistol; whereas

Cast of the face of Charles XII. after death.

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⁽¹⁾ See Coxe's Travels into Sweden, p. 357. Lond. 1784.—"A ball from a falconet usually weighs one pound and one eighth, at the least." Ibid.

^{(2) &}quot;Que l'on considéré que la balle qui frappa Charles XII. ne pouvait entrer dans un pistolet, et que Siquier n'aurait pû faire ce coup détestable qu' avec un pistolet caché sous son habit."—Also, in giving the account of the King's death, Voltaire makes the weight of the ball equal to half a pound. "Une balle pesant une demi-livre l'avait atteint à la temple droit." Œuvres de Voltaire, tome VII. Histoire de Charles XII. pp. 280, 283. Génève, 1768.





it is plain that the real shot was a pistol bullet. The CHAP. VII. appearance of the wound in the temple also shews that it was inflicted by a bullet going out, and slanting upwards, having entered into the lower part of the scull behind: and that the shot was directed by a private hand from belfind, and did not come from the enemies' works, is obvious from this circumstance, and from the fact of the King's having drawn his sword half out of its scabbard, in the agonies of death, to immolate his assassin3. Who can read the conversation which passed between Count Liewen, the King's Page, then upon the spot, and Mr. Wraxall, without being convinced that the King was assassinated, even if this evidence were wanted: but as it is so nearly connected with a very important event in history, and serves to confirm Count Liewen's testimony, we have caused an accurate drawing of this Cast to be engraved, in which the nature of the

^{(3) &}quot;I followed the Officers to the place where the King was killed. The Prince ordered the Generals and Officers who were present to place the body in a litter prepared to convey it to the head-quarters; one and twenty soldiers standing around with wax tapers in their hands. We observed that the King, in the agonies of death, had drawn his sword half out of the scabbard; and that the hilt was so tightly grasped by the right hand, as not to be disengaged without difficulty."—See the Account taken from the Narrative of Philgren, a Page to the Prince of Hesse, who was that day in waiting. Coxe's Trav. into Sweden, p. 354. Lond. 1784.

^{(4) &}quot;There are now very few men alive who can speak with so much certainty as myself. I was in the camp before Frederickshell; and had the honour to serve the King, in quality of Page, on that night when he was killed. I have no doubt that he was assassinated. The night was extremely dark; and it was almost an impossibility that a ball from the fort could enter his head, at the distance, and on the spot where he stood. I saw the King's body, and am certain the wound in his temple was made by a pistol bullet."—Count Liewen's Conversation with Mr. Wraxall. See Coxe's Travels &c. p. 357.

CHAP. VII. the wound in the right temple may be as plainly discerned as if the original had been exposed to view. The same engraving will also serve to exhibit the countenance of Charles the Twelfth with much greater accuracy than any other portrait can pretend to: it remained unaltered even in death; and displays, in a very striking manner, the haughtiness of character for which this hero was so remarkably distinguished.

> We shall now close our account of Stockholm with some remarks upon the Royal or Public Library, and the actual state of literature in Sweden. For the substance of our information upon the latter subject, we are indebted to the communications made to us by the King's Librarian, Mr. Giorwell. We are the more anxious to oppose Mr. Giorwell's statement to the observations we before introduced upon the state of Sweden and Swedish literature, because, coming from a Swede, it will shew what their opinions are respecting their own country. This gentleman drew up for us a Memoir upon the progress and state of Letters and of the Arts, during the reigns of Gustavus the Third and Gustavus the Fourth; prefacing it, at the same time, with a few remarks upon the state of learning in Sweden at a much earlier period;—but, of course, we shall only extract from this memoir the principal facts. In his preface to it, the learned author dwells too much upon the importance of the historical ballads of the Scalds, and other of their records called Sagor; as also upon the Latin Chronicles of the middle ages, and the code of laws extant about the same time in the language of the country, of which we have hardly now any remnant.

remnant'. We shall therefore pass immediately to the rest CHAP. VII. of his observations; beginning with the Royal Library, from Royal a view of which, perhaps, a better estimate may be made of the encouragement given to literature, than from almost any other document; because this collection is open to the •public, and was formed under the brightest auspices Sweden has yet beheld. It consists of three long galleries in one of the angles of a small court belonging to the Palace, and is certainly the finest literary establishment in all Sweden. It was first appropriated to public use during the reign of Gustavus This Library was plundered at the departure of Queen Christina in 1654, and suffered from fire during the conflagration of the Palace in 1797. In the reign of Gustavus the Third, it was greatly enriched; and after his death augmented, by the addition of all his private library, which was very select.

^{(1) &}quot;Entre autres ouvrages de cette periode," observes Mr. Giorwell, "nous en avons un qui a pour tître 'Le Miroir des Rois et des Regens.' C'est un vrai trésor de sagesse et politique. Il a été traduit en Latin, et publier par Jean Schefferus, à Stockholm, 1669, in folio."

⁽²⁾ It is very difficult to obtain any accurate account of the state of Sweden at this period, and of the opportunities of plunder to which the Queen's departure gave rise. Among the literary losses which the Royal Library then sustained, it is said that the Codex Argenteus, now at Upsala, was one; and that this valuable manuscript was embezzled and carried out of Sweden by Isaac Vossius. The manner of its restoration afterwards was before mentioned. The losses appear to have been owing to the disorder which arose in packing up the articles which the Queen took away with her at her departure; for it seems, from what Puffendorf has related, that the ornaments of the Coronation of Charles Gustavus were afterwards borrowed. "La Suède se trouvoit épuisée; et la Reine avoit fait emballer et transporter en Allemagne la plus grande partie des meubles de la couronne, de sorte que presque tout ce qui parut dans cette cérémonie avoit été emprunté."—Histoire de Suède par Puffendorf, tome II. p. 420. Amst. 1743.

CHAP. VII. select, and consisted of 14,000 volumes, forming a most valuable collection of works in history, politics, and general literature. His library was moreover rich in manuscripts: it contained all the Sagor, Chronicles, and Diplomas anterior to the reign of Gustavus Vasa, together with many beautiful manuscripts of antient authors and of the middle age. Among the last, the most remarkable is a copy of the Four Gospels in folio, with initial letters in gold; thence called Codez Aureus. the Codex Aureus. This manuscript seems to have belonged to some splendid ecclesiastical establishment in Spain: it was purchased in Madrid in 1690, by the learned Sparvenfeldt, Master of the Ceremonies to Charles XI. who travelled, at the expence of that monarch, all over Europe, in search of manuscripts. His autograph appears upon this manuscript in the following words: "Pretiosissimum hunc Evangeliorum Codicem emi ex famos dilla Bibliotheca illmi Marchionis de Liche Mantuæ carpent. A. 1690. d. 8. Jan. Ego Joannes Gabriel Sparvenfeldt nob. Suecus."

Coder Giganteus.

A very remarkable manuscript preserved in this library is the Codex Giganteus; so called on account of its colossal size. It was taken, among other spoils, from a Benedictine monastery at Prague, during the Thirty-years' war, by Fieldmarshal Count Königsmark. It is two Swedish ells in height, and of proportionate breadth. This code is in fact a species of library in itself: it contains, besides the Vulgate, a collection of writings upon the Jewish Antiquities, by Josephus, Isidorus, &c. Also the Cosmæ Pragensis Chronicon Bohemiæ. A learned Hungarian of the name of Dobrowski made a journey to Sweden in 1792, expressly to examine this codex.

Because

Because the volume is terminated by a treatise on magic, CHAP. VII. ornamented with an illuminated figure of the Devil. several foreigners who have visited this Library, being struck with the enormous size of the volume, and with this singular illumination, have agreed in calling it "La Bible du Diable and Codex Diaboli.". There is also a most curious manuscript, entitled "Magistri Johannis Arderum de Slewark, de Arte Physicali et de Cirurgiá, quas ego prædictus Johannes fervente pestilentià, qua fuit anno Domini millesimo cccxlix. usque annum Domini M. CCCCXII. Morem (aut moram) egi apud Newerk, in comitatu Slothingui, et ibidem quamplures de infirmitatibus subscriptis curavi." This manuscript is upon a vellum roll of considerable length, divided into columns. In these columns are represented the figures of the persons diseased; and by the side of them a description of the disorder, and the remedy prescribed. There are also anatomical figures for midwifery &c. Considering the date of this work, it is very curious to observe the words "Pro morbo qui dicitur" *** ** ** **, followed by the French name of a disorder which is supposed not to have been known in Europe before the discovery of America.

Among the typographical rarities of this Library, we saw one, in large quarto, with wood-cuts, which would hold a distin-

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⁽¹⁾ This manuscript, for particular reasons, is not often shewn to strangers. The Authors of the Voyage de Deux Français were not allowed to examine it; yet if the account of it which they received from the Abbé Albertrandi. Librarian of the King of Poland, be correct, it may have received the name of "The Devil's Bille" from a very different cause: it may have been so called from the confession, "en lettres rouges sur un fond brun" at the end of the manuscript, of its former diabolical owner.—See the work above cited, tome II. p. 84. Paris, 1796.

CHAP. VII. distinguished place in any collection: it has this title— Typographic Rarities.

"Speculum Humanæ Salvationis;" being without date or printer's name, or any indication of the place where it was Some have supposed that it proceeded from the press of John Coster, at Harlem, in 1440: others, that it was printed by John Faust, at Mayence, in 1459. Also, Cicero de Officis, upon vellum, by Faust and Schoeffer, at Mayence, 1466. The first edition of *Homer*, at *Florence*, 1488, in the highest state of preservation, upon paper, with a wide margin. But more valuable than all these is the copy, here preserved, of the identical Vulgate which belonged to LUTHER—Biblia Vet. et Nov. Testamenti; the margin being covered, as well as all other spaces open to his pen, with his own autograph notes. This volume was printed in folio, at Lyons, in 1521. It was found by the Swedes at the capture of Wittenberg. curious commentaries which Luther has here added, seem to make known the progress of his ideas upon subjects of divinity and ecclesiastical discipline. By trophies such as these, taken by the Swedes during the Thirty-years' war, in consequence of the victories won by Gustavus Adolphus, and by Charles Gustavus, the libraries of Sweden became enriched, as those of Germany, Prussia, and Denmark became impoverished. But the most precious part of the whole collection is preserved in a small chamber adjoining the Library; namely, fourteen large volumes, in folio, of Original Designs by the old Masters, and of every School'. This collection was bought

Collection of Original Designs.

by

⁽¹⁾ This valuable collection contains 3025 Designs, distributed according to the different Schools, in the following order:

STOCKHOLM.

by the Senator Count Charles Gustavus de Tessin, during his CHAP. VII. embassy at Paris, and was presented by that nobleman to King Adolphus Frederic. After the death of his father, Gustavus the Third gave it to the Library, for the use of the State. To this collection is added an Historical Catalogue by the Grand Chancellor, Baron De Sparre, and in his own hand-writing. Almost all these designs are unique. The principal part of those belonging to the Roman School are by the hand of Raphael.

From this establishment we cannot separate the Museum, Royal founded by the Duke Regent, in 1792. It contains all the Greek, Roman, and Swedish antiquities which were formerly scattered over the kingdom. Some of the finest paintings belonging to the Royal Collection have been added to the Museum:

Florentine Scho	ool.						•				183
School of Siens	na.										43
Roman School											406
School of Lom	bardy	, .									29
Bologna .	٠٠.										517
Milan, Cremon	ıa, ar	nd o	othe	er I	tali	an	To	wns			19
Venice											157
Genoa, Naples	, and	Sc	hoc	ls c	of S	Spai	n				75
Designs of unk	now	a M	[ast	ers							234
Flemish, Dutch	h, an	đG	ern	nan			•				470
Swedish design	1 s .										105
Portraits of cel	ebra	ed	Pai	nte	rs,	of	the	It	alia	n,	
German,	and i	ler	nisł	s Sc	cho	ols			•		83
Drawings of th	ie Fr	enc	h S	cho	ool	•.					566
Various designs	s of A	Ant	ient	M	ast	ers					138

CHAP. VII. Museum': it occupies two grand galleries below the Library. The immediate care of the Library was entrusted to Professor Malmstrocm; and the management of the Museum to the Grand Chamberlain, or Intendant of the Court, Mr. Fredenheim. Besides this library at Stockholm, and that of Drottningholm, there is also another, belonging to the Crown, at Haga, extremely select, and composed chiefly of scarce books, collected by Count De Creutz, when he was Minister in Spain and afterwards in France. The two libraries of Drottningholm and Haga are preserved exactly as they were under Gustavus the Third; and they are independent of the great libraries of the kingdom, of which we have now spoken.

Observations on the Literature of Sweden.

The first dawning of any national spirit of literature in Sweden does not date earlier than the reign of Gustavus Adolphus, in the beginning of the seventeenth century: for although Gustavus Vasa, in new modelling the State and the Church, had burst the fetters of that liberty of opinion which is essential to the very being of knowledge, yet the religious controversies in which the State was involved arrested the progress of letters almost an entire century. To Gustavus Adolphus it was owing that the Swedes, as a people, first began to feel an emulation of being distinguished in the world of Letters. The examples set by this monarch,

in

⁽¹⁾ Among many other remarkable pictures in the Museum, there is one, a Portrait of a Woman, with a Negro; remarkable for this artifice of the painter, who, to hide the sallowness of complexion in the Lady who sate to him, has introduced the head of the Negro. She would have appeared as a Mulatto, but for the contrast thus afforded.

in reserving, as his own share of plunder, all the literary CHAP. VII. spoils taken in war, and afterwards presenting them to the literary establishments of his country2, was followed by his successors: and it has greatly tended to add to the literary wealth and character of the nation. His extensive knowledge and patronage of learning have never been duly apprecented; being lost in the splendour of his military achievements. The library at Upsala, according to Olaus Celsius, owes its origin to Gustavus Adolphus'. The plans devised by that monarch for the advancement of literature in Sweden were adopted and perfected by his daughter, a princess marvellously distinguished by her talents and love of letters. Christina had no sooner mounted the throne, than she invited to her Court men of genius and high literary character, from other countries. Descartes was one of these: he died at Stockholm. Among her own subjects, she encouraged and rewarded all those who rendered themselves conspicuous by their talents: and in this list was signalized one whom the Swedes consider as the greatest genius which their country has produced; namely, Stiernhielm; known among them as a poet and philosopher of such eminence, that they have bestowed upon him the name of Polymston.

During the wars of Charles the Tenth, Eleventh, and Twelfth, learning made but little progress in Sweden.

Never-

^{(2) &}quot;Ingentem auri argentique prædam militibus reliquisset rex; sibi solos reservavit libros, quos sine morâ in patriam misit, Upsaliensi Bibliothecæ inserendos."—Ol. Celsii, Hist. Bib. Upsal. p. 21.

⁽³⁾ Ibid.

CHAP. VII. Nevertheless, under the special protection of Charles the Eleventh, the study of Northern Antiquities and of Natural History became a favourite pursuit among the scholars of the country. Under Frederic the First, a long period of tranquillity and peace with foreign powers afforded opportunities. to the national genius to direct its inquiries towards other branches of knowledge. At this time, the prevailing taste inclined towards the sciences of Natural History, especially to Mineralogy; and towards the study of Political Economy. But it was reserved for Adolphus Frederic, or rather for his enlightened spouse, Queen Louisa Ulrica, to protect, encourage, and gather round the throne, philosophers and artists, in all the branches of learning and the Fine Arts. Sweden herself has never produced so many distinguished literary men as beneath the sway of this princess. As the greater part of them were still living under Gustavus the Third, and during his reign some distinguished dramatic writers, together with several artists, were added to the list, it has been usual to consider them under one point of view, as forming a single epocha, which has been denominated THE GOLDEN AGE OF THE SWEDISH AUGUSTUS.

> Gustavus the Third inherited from his mother, Louisa Ulrica, that refined taste, and that generosity of soul, which had given life, energy, and capacity to the Swedish genius. Equally illustrious in political talents and in warlike achievements; distinguished by his passion for literature and the arts; by the care which he took to maintain and foster all the establishments necessary for their culture; by the talents which he displayed in

many of his own compositions; by his seducing eloquence, in which he surpassed all other princes of his time; he was eminently fitted for the conspicuous station he held, and for becoming the ornament of that age of intellectual improvement in Sweden which his own genius and example had consummated. But in speaking of the Golden Age of Gustavus the Third, it ought also to be stated, that Sweden had among its nobles many patrons of literature, men of the highest talents, whose zeal and abilities greatly tended to accelerate its progress; to mention in this number only two—Count De Tessin and Count De Höpken; the first of whom combined within himself almost every mental accomplishment.

In the present state of literature in Sweden, the sciences most cultivated (exclusive of Divinity and Law) are, the History of the Kingdom, and the Statistics of its different Provinces; Natural History, especially Mineralogy, Botany, and Chemistry; also Astronomy; Rural Economy, and Surgery. The field of Belles Lettres has afforded two epic poems, pastorals, satires, some anacreontics, operas, and dramas. With regard to the arts, in Architecture, in Sculpture, Painting, Engraving, and in the art of striking Medals, very considerable progress has been made of late years. The Literary Establishments of Sweden have been before mentioned: it will not, therefore, be necessary to enumerate them: they consist of Universities, Academies, Societies, public and private Libraries, Cabinets of Natural History, Antiquities, Coins, and other useful Besides the Universities, there are Literary institutions. Societies established in some of the towns of Sweden; as, for example, the Society of Sciences and Belles Lettres at Gothenburg,

CHAP. VII. Gothenburg, founded in 1773. Sweden has also twelve colleges, called Gymnasia; one in each episcopal city: and in all the towns there are Public Schools. Some of the Gymnasia have their own libraries: and in this number, the library of Linkocping deserves to be particularly noticed, on account of its valuable manuscripts relating to the history of Sweden. A Military Academy, established in the Royal Palace at Carlberg, was founded by the Duke Regent in 1792. The youths admitted into this Academy are educated under excellent masters, and, moreover, instructed by Professors, chosen for this purpose, in all the arts and sciences.

> In the year 1770, a Royal Committee for the guardianship of Public Education was established: it was charged with the general and immediate inspection of all places and establishments for the instruction of youth. It continued in force for about twenty years, when, in 1771, it was suppressed by order of Gustavus the Third. Great hopes of its revival, under the reigning monarch, were entertained at this time, by those who had the best interests of their country at heart. We were not made acquainted with the reasons for its suppression.

> In Stockholm, moreover, besides a Chirurgical Society, there is a Royal College of Medicine, to which are attached a Library, an Anatomical Theatre, and a Lying-in Hospital. The members of this College give public lectures, in Anatomy, Botany, and Pharmacy. In the limits of a work of this kind, it is impossible to enter fully into the detail of all the minor establishments affecting the general state of knowledge in Sweden. For this reason we have omitted to

> > notice

notice many private cabinets in different parts of the country, CHAP, VII. although some of them be of considerable importance; as the collection belonging to Baron De Sparre, Senator Baron De Ridderstolfe, to the Count Brahe, and General Count Horn: in all of which there are valuable manuscripts.

With the slight knowledge that we had of the Swedish Remarks on the Swedish language, we could nevertheless discern the beauty of the Poetry. Swedish poetry; and we shall add a short account of some poetical and other works: but the poetry is of a peculiar cast. The Swedish Poets are fond of rhyming in trochaic dissyllables, and of introducing Alexandrines into their compositions. The language is exceedingly soft and harmonious, although not equal in this respect to the language of Finland, which may be considered as a concentration of pleasing sounds, admirably adapted to poetry, and fuller of vowels than the Italian. That of Sweden is perhaps more dignified when in prose; but in verse, the measure being so frequently trochaic, is perhaps best suited to convivial songs and accompaniments of the dance. It is very easy to give an imitation of this trochaic or balladmetre, with the double rhyme:—

> Let us drink and merry be, Laughing, singing, dancing: Who so blithe, so gay as we, Now the night's advancing?

All our daily labour done, Set the cans a-clinking: Fill and swill, till morning sun Calls us from our drinking!

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CHAP. VII.

Some of our old English ballads were composed exactly in the same style. The old song of "Barbara Allen's Cruelty" is quite in the character of Swedish poetry:

"In Scarlet towne, where I was borne,
There-was a fair maid dwellin,
Made every youth crye, Well-awaye!
Her name was Barbara Allen."

But the Odes are sometimes written in a much more turgid and pompous manner, upon the most solemn, grave, and even melancholy subjects, with long stanzas and Alexandrine lines; and of this kind of metre there are many examples among the specimens of early English poetry. The following list will serve to shew the subjects of the most-admired native compositions in Sweden.

POEMS.

Last of Poetical Works.

- 1. "The Passage of the Belt by Charles Gustavus (Taget ôfver Belt):" an heroic poem in twelve cantos, by Count De Gyllenborg: also author of "The Seasons (Årstiderne)," and of a satire called "My Friends (Mina Dammer);" works of great merit.
- 2. "THE HARVEST (Storbarm)," by the nephew of the preceding, Count Oxenstierna; a pastoral poem, in nine cantos.—This poem is much admired in Sweden.
 - 3. "Swedish
- (1) The Reader may compare with it the first stanza of a poem by Professor Franzen of Abo, given in the Appendix:

Unga Flicka i din vår
Bind dig Myrtenkransen
Dansa medan Du förmår
Snart är Du ur dansen.

- 3. "Swedish Liberty (Svenska Friheten);" an epic poem, by the late CHAP. VII. Mr. Dalin, author of the best History of Sweden.
- 4. "ATIS AND CAMILLA (Atis och Camilla)," by the late Count Creutz.—The object of this poem is to represent love in the most delicate colours. It is a work of great energy, and full of pleasing but voluptuous descriptions.
- 5. "THE LEGACY OF A FATHER TO HIS CHILDREN," by Mr. Liljestrule; a didactic poem.
- 6. "The Dalecarlians (Dalfariams)," by the late Mr. Engzell; a political poem, in praise of the fidelity and courage of the Dalecarlians, ready to sacrifice themselves in defence of their Country and for their King.

TRAGEDIES.

- 1. "Oten" (founder of the kingdom of Sweden), by Mr. Leopold;—beyond Tragedies. all contradiction, the finest work of the kind which the Swedes have.—

 Leopold is called the Voltaire of Sweden.
 - 2. "Sune Jarl," Grand-Mayor of the Kingdom; by the Count De Gyllenborg.
- 3. "Ingiaio itrave," King of Sweden; who burns, at a festival, the minor kings his vassals, to render himself despotic;—by Mr. Adlerbeth.

GRAND OPERAS.

- 1. "Gustavus Basa," by the late Mr. Kellgren; considered, not only by the Operas. Swedes, but by all the Foreign Ministers resident in the Country, as surpassing, in magnificence and in the style of its composition, every theatrical work of the kind in Europe.
- 2. "THE HOLIDAY OF SWEDEN (Sugar);" composed upon the occasion of the erection of the statue of Gustavus Vasa in the Place des Nobles; by Count De Gyllenborg.

MINOR OPERAS.

1. "OPPORTUNITY MAKES THE THIEF" (Swedish proverb—Zitfalle gior Zjufven); by Baron D'Armfeldt, distinguished by the high favour in which he was held by Gustavus the Third, and by the disgrace into which he fell

CHAP. VII. when Duke Charles became Regent.—His having enjoyed the confidence of the former, would sufficiently account for the hatred entertained towards him by the latter.

> 2. "THE EXTRAVAGANT MUSICIAN (Musif: Murmen);" a very popular piece; by Mr. Enwallson; also author of another, which has had great success, called "Rrono-Fogdarne."

DRAMAS.

Dramas.

- 1. "Siri Brahe;" by Gustavus the Third; who also composed another piece, called "Natatie Narisfin."—These are much extolled by the Swedes, but have never been printed.
- 2. "Helmfeldt," by Gustavus the Third.—Helmfeldt was son of a Burgomaster of Stockholm, who, after many extraordinary adventures, became one of the greatest Generals of Charles XI. and in that state was recognised by his aged father, who believed him dishonoured and dead.
 - 3. "Dirger Jart," Regent of the Kingdom; by Count De Gyllenborg.
 - 4. "THE FATHER RECONCILED (Den Försonade Fadren);" by Mr. Lindegren.

COMEDIES.

Comedies.

- 1. "THE NEW MASTER (Mya Herrstapet);" by Count De Gyllenborg.
- 2. "THE OFFICIOUS (Niasfen);" by the late Mr. Schroederheim.
- 3. "THE BOASTER" (Captain Puff, or Storpraturen); by the late Mr. Kexel. -This is the best piece belonging to the Swedish Theatre, in the style of low comedy.

These are the principal productions of the Swedish Muse, and they are all original compositions. To this list may be added an heroic Drama in prose, composed by Gustavus the Third, entitled "Gustavus Adolphus and Erba Brahe (Gustaf-Abolph och Ebba Brahe)." It was performed at Drottningholm, the 11th of September 1783, by the Duke Charles, the

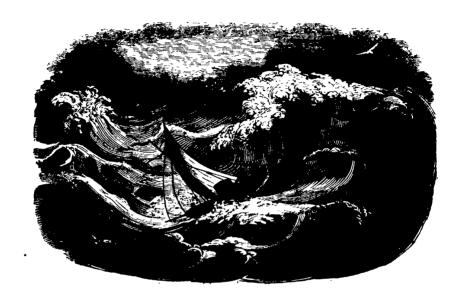
Princess

Princess Royal, and other persons of the highest distinction CHAP. VII. about the Court. The story upon which this piece turns is founded upon the love felt by the young King, Gustavus Adolphus, for the beautiful Ebba Brahe, daughter of a Peer who ranks highest in the order of the Swedish Nobility; a passion which he sacrificed for the honour of his august family and for the throne of Sweden, according to the haughty notions of his Court, especially of his mother the Queen Dowager. This piece, characterized by the genius and political talents of Gustavus the Third, was afterwards put into Swedish verse by Mr. Kellgren, and performed for the first time in Stockholm upon the 24th of January 1788. It may be found printed in the collection of Mr. Kellgren's works.

In the higher walks of Literature we should now vainly Works in the seek for works of much importance. Celsius, Bishop of Lund, of Literature. is the author of a History of Gustavus Vasa, and his son Eric XIV. The historical work of Mr. Dalin has been already noticed. Tacitus has been translated by Mr. Steenpiper. The master of the Cathedral School of Stockholm may be considered as an historian of merit: his name is Murrberg: he wrote an account of Christian's residence in Stockholm in 1520. Biography has also found an advocate in Mr. Nordin, who has written the Lives of Illustrious Swedes. There are some distinguished men at the University of Abo; but of these we may speak hereafter. Much may yet be expected from the Swedes; and their literature may revive; but it must be owned the prospect is a bad one. The spirit of the people remains yet unbroken: but where the liberty of the press is annihilated.

CHAP. VII. annihilated,—and Russia, like one of those moving bogs, of which we read, in Ireland, comes slowly but surely on, threatening to overwhelm the country', and to extinguish all that remains of genius and heroism in the land,—he must indeed be sanguine who can hope to see Sweden regenerated and her glory restored.

⁽¹⁾ The University of Abo, together with all Finland, has already fallen under the dominion of Russia.



CHAP. VIII.

STOCKHOLM TO ALAND.

Characteristical Swedish Exclamation—Departure from Stockholm—
Commencement of the Winter season—Grisselhamn—Telegraph—
Passage-boat—Geographical Nomenclature—Dangerous situation of the Author and his Companions—Providential escape—Aspect of affairs in landing upon Aland—Frebbenby—State Messenger of the Court of Russia—Ruins of Castelholm—History of that Fortress—
Skårpans—Change in the Manners of the People—Bomarsund—
Vargatta Sound—Sledge-Travelling—Isle of Vardö—The Party embark across the Delen for Rumlinge—The Author induced to return

return to Skårpans - Festivities of Christmas Eve - Attempt to convey the carriage upon the ice - Sudden storm - Village of Vardo—Interior of an Aland Dwelling -Breakfast of the Natives -Extra Post—A turbulent sea frozen in one night — Cause of the rapid change — The Author recrosses the Bomarsund — Southern Passage to Kumlinge—State of the Delen—Geological features of Aland-Manners of the Alanders in Winter-Number of inhabitants -Means of subsistence - Clergy - Land-measurers - their destructive influence and depredations.

Characteristical Swedish exclamation.

CHAP. VIII. Among the peculiarities of national habits which cannot fail to be remarked by a stranger in Sweden, is the universal prevalence of an expression constantly in use, although adapted to a great variety of feelings and circumstances. This expression consists of two monosyllables, Jà så! pronounced with a strong aspiration upon the first, and a lengthened tone upon the second; varying, however, according to the passion that is to be expressed,—Yah so! It is impossible to give an idea of the innumerable significations to which Yah so! is applied: from the throne to the cottage it constitutes four-fifths of the remarks made by the Swedes upon all occasions. Sometimes, when a person is relating a story, it comes out slowly, as a kind of obliging assent to the credit of his narration, and an encouragement for him to proceed—Yah so! Yah so! And then it is given in a subdued and whining tone: at others, upon suddenly comprehending what was before a paradox, it bursts forth with emphasis—Yah so!!!! Again, at other times, it is used as a term of defiance, and with a more guttural sound, upon being menaced—Yach so! And then it is accompanied by a

corresponding swing of the head. Again in rejoinder; as CHAP.VIII. for example: Quest. Who are they? Answ. Englishmen. If a Swede were told that his head REJOIND. Yah so! would be struck off within the next half hour, he would say, beyond doubt, Yah so! This is not peculiar to the Capital, or to any one of the Provinces, but may be observed alike in all parts of the Country. Wherever a Swede is found, Yah so! is sure to denote his presence.

We felt sorry when the time arrived in which it was necessary to bid farewell, not only to Yah so! under all its multiplied associations, but to the Swedes and to their Country. Being tempted by the hope of overtaking the friends with whom we entered Sweden', before they should have left Petersburg, we had waited only for the coming of the frost to set out for Russia. We left Stockholm, upon Departure wheels, before the snow had fallen, upon Saturday, Dec. 14. holm. The mercury in Fahrenheit's thermometer fell this day, at noon, only four degrees below the freezing point, and it had not been so low during all the month of November. Soon afterwards, however, its descent was, with little variation, progressive. At seven in the evening it fell 21° below freezing.

We had bought of Signor Acerbi a very excellent German Bâtarde, which that traveller had caused to be constructed in Vienna according to his own directions, and it was provided with many conveniences for travelling. We have given an account of such a vehicle in a former volume.

We

⁽¹⁾ Professor Malthus and the Rev. W. Otter,

⁽²⁾ See Vol. I. p. 14. Camb. 1810,

CHAP.VIII. We passed the first night at Kragsta. In our way thither,

through Ensta, Ösby, Hall, and Rilanda, the country was more open than usual, and much cultivated. The roads were rendered as perfect as possible by the frost. According to the custom in Sweden and Russia, our postillion drove four horses abreast. We passed several lakes, which were frozen. The next day we journeyed through Svanberga, Stabby or Staba, and Tresta, to Grisschamn. The cold was now become so piercing, that we could see little of the country. At Staba we estimated the temperature at noon: . the mercury, by Fahrenheit's scale, fell fourteen degrees and a half below freezing. Afterwards it became much colder. We did not venture to open a window; but the vapour of our breath froze into a thick coat of ice upon the glass. The Winter had now evidently set in, with considerable severity; but the atmosphere was clear and dry. The people were all rejoicing at the change; because this is to them the heyday of the year. The lakes were crowded with boys skaiting, or with peasants pushing before them sledges laden with different articles. Their winter dress is a sheep-skin coat, worn with the wool towards the body: it is white and clean, and has a neat appearance. Upon their heads they wear handsome caps of dark fur, with crowns of scarlet cloth. Every house that we entered was filled with pro-The frost preserves all their meat, which is, therefore, much more wholesome than if it were salted. Even the poorest peasants have a share of luxurious diet

at this season of the year. We said to some of them, that it was very cold; to which they replied, rubbing their

hands,

Commencement of the Winter Season. hands, and with looks of joy, "Yes, bravely cold—beautiful CHAP, VIII. weather! Now you may travel as fast as you please!"-Indeed the roads were rendered so smooth and hard, that they seemed like one mass of stone. To give an idea of the severity of the frost, before we arrived at Grissehamn, it is only necessary to state, that some Madeira wine, in bottles, in the well of the carriage, became solid: when we attempted to pour it out, the wine would not flow, but fell, at last, slowly, in successive drops. All our bread was frozen, and could not be cut. We broke it with a hammer, and it glittered, within, like loaf-sugar. We had some cold roasted game, and this cut like a snow-balk. All the furs we could use in the close carriage, with all the windows up, would not protect us; we seemed to be sitting in the bleak and open air, Over our feet we had thick yarn stockings covered by stout leather boots, and over these again were boots made of the hides of rein-deer, with the hair on the outside, and doubly lined with sheep-skin covered with black wool. We had, moreover, fur caps upon our heads, and bear-skin pelisses over our bodies, besides several flannel waistcoats; and upon our hands, gloves of sheep-skin, covered by double gloves of fur and wool. Yet all these precautions did not protect us from feeling the severity of the weather. The Swedes told us, and we had reason afterwards to believe the truth of what they said, that we should be less sensible of the action of the atmosphere if we travelled, as they did, in open carriages. We found the houses in a very different state from that in which we had been accustomed to see them, and carefully guarded from

CHAP. VIII. the admission of external air. The windows in all the rooms were nailed up, and paper had been pasted over the crevices; yet the natives laughed when we conversed with them about their climate, saying it was nothing to what we should soon experience.

> In the first stage this day, an iron bolt belonging to the carriage snapped like a piece of glass and was broken. This compelled us to proceed to an iron-foundry belonging to a Mr. Arfvedson of Stockholm, situate half-way between Svanberga and Staba. The superintendant of these works told us that a large quantity of bar-iron is manufactured here, which is sent to Stockholm for exportation. added, that they sometimes import sea-coal from England, for the use of the foundry. The same level country and richly-cultivated fields appeared the whole way to Tresta, where we crossed a ferry. Here the land wore a more sterile aspect, exhibiting a scene of hills and rocks the whole way to Grissehamn. This place consists of nothing more than a single post-house, built by Government about twenty years ago; near which is stationed a Telegraph. It serves also to travellers as an inn, although the worst in all Sweden, There is no situation better adapted for a house of accommodation; but a place more poverty-struck, dirty, cold, or in all respects more wretched, can hardly be conceived. It stands upon a rock, close to the mouth of the Gulph of Bothnia. The country around it is low, barren, and full of rocks, with here and there a few stunted trees and shrubs. We were detained at this miserable place, owing to the violence of the wind, which was now stormy. The mariners who conduct

Gresschamn.

Telegraph.

passengers over to Ekcrö would not put off from the shore. CHAP.VIII. During this delay our situation was rather awkward; for while the excessive coldness of the weather drove us into the only room allowed for shelter, volumes of smoke from some green boughs piled beneath a large open chimney expelled us again into the open air. There was no other fuel to be had, and but little even of this. We set off, therefore, to visit the Telegraph erected near the spot. This machine is not only used for Government despatches; it gives notice, across the mouth of the Gulph, when travellers arrive—how many horses, and what other necessaries and accommodations they may require—what boats will be wanted. The Director, who is the Postmaster, was perfectly versed in the art of working it: he said he would be speak a dinner for us on the other side of the water; and regretted that he had no To make him easy, we told provisions himself to offer us. him that we were tolerably provided for the day, and that he should share with us a part of our stock. He then permitted us to examine the Telegraph tables; which, perhaps, are much the same everywhere; but the simplicity of these struck us as being worth notice. He is able, according to his own statement, to work 1024 changes; and conveys intelligence to the distance of five Swedish miles and a half—nearly forty English. He said that this Telegraph was constructed after an English model. We were quite surprised at the facility and speed with which intercourse is carried on. Any message whatever may be sent by it, and in a few seconds. His book contained the ranks and professions of all travellers likely to arrive:

of all the Russias," whose coming we thought no Swede would wish to announce. We sent an order by it, to have a dinner prepared in a warm room, and five horses ready for starting. The signs of communication were all figures, ranged beneath a letter, in this order:

	A	
1	1	1
2	2	2
3	3	3

The letter A. shews to what table of words or sentences the several signs belong; therefore, when the letter is changed, a new series is referred to: and there may be, of course, as many sets of changes as there are letters in the alphabet. The Director of the machine is placed in a small square room, with a telescope. He amused us by holding a conversation with his distant comrade. Sterile as was the appearance of the land about Grissehamn, it must wear a pleasing aspect in summer, from the number of the inlets of the Gulph intersecting the rocky shore. The opposite coast, when examined with a glass, was at this time glittering with masses of ice beginning to accumulate upon the shore.

We were detained the whole of Monday at Grisschamn. On Tuesday, December 17th, as soon as daylight appeared, we set sail. • The wind had been gathering strength the whole

of the preceding night; and we endeavoured, but in vain, CHAP.VIII. to prevail upon our boatmen to take in a few reefs in the Passage-Boat. enormous sail with which they ventured forth in their small and rude bark. The carriage had been put on board soon after sunset; and we scated ourselves within it, to avoid as much as possible the piercing nature of the blast. Scarcely had we cleared the rocks around the bay of Grissehamn, when the vessel—gunnelling on her lee-side from the pressure of so much canvas, neither proportioned to the boat nor to the weather—shipped a sea that threatened at once to sink The effect of this was rendered the more alarming, by the beginning of that horrid state of confusion, in which men lose all presence of mind: one pulled at the boom, another let slip a wrong rope, and all management of the boat seemed to be lost. We made our escape from the window of the carriage, by means of the main-stay, which was within reach: and in another instant, those who could swim would have taken to the water, with a view to reach one of the rocks over which the sea was beating, and thence endeavour to gain the nearest shore. At this dreadful moment, when disorder and the tempest seemed to govern every thing, the man at the helm, by a daring but dextrous effort, put the vessel quite about, and saved us all. management of the sail was then recovered, and, getting under a lee-shore, we rolled back to Grissehamin.

The tempest continued all that day, and throughout the entire night. On the following morning, December 18th, it was still more violent, with a contrary wind. The

CHAP. VIII. thermometer of Fahrenheit was this morning sixteen degrees and a half below freezing. Upon our return, the poor man's fuel was all consumed. We sent for a load of wood; and making a large fire, managed to keep his airy chamber heated about up to the freezing point; living the whole time in a dense atmosphere of smoke, which we endeavoured to avoid by sitting on the floor. Our provisions were all expended, and there was literally nothing to be had upon the spot. We therefore sent our Interpreter, Peter, upon a sledge, along the smaller bays, which were now covered with ice, to search for and purchase provisions, which were plentiful enough inland. He returned at the close of the day, bringing the side of a hog and about thirty eggs. We could not even procure a candle, to cheer the long night in our cold and suffocating apartment; but by taking out those which were in the lanterns of our carriage, we obviated this inconvenience, and were able to amuse ourselves by writing, while the servants made a fry of the hog and the eggs, to which we invited our host. He told us that the boatmen upon this station are usually dextrous in the management of the wretched skiffs entrusted to their care, and that boats are rarely lost in making the passage. The last accident of this kind happened about a month before. A. boat, overladen with forty tons of corn from Upsala, foundered in its passage to Aland, in a gale of wind; and one of the richest farmers in Å land.

⁽¹⁾ We used a thermometer with the centigrade scale of Celsius; but as Fahrenheit's scale, absurd and inconvenient as it is, still obtains a preference in England, we have always adapted our observations to Fahrenheit's scale.

Aland, together with the rest of the crew, were lost. In the CHAP.VIII. year 1791, a Grissehamn boat, returning from Ekerö with the mail, but without passengers, was driven, by a strong westerly wind, into the Baltic, and never heard of afterwards. With these exceptions, he said, no similar accident had occurred for the last forty years. However this may be, no person, seeing the saucer-like boats in which they make the passage, ballasted only with a few large and loose stones, and reflecting upon the boisterous weather to which they must be liable in these straits, would think there was much probability of their escape. Perhaps there is no part of the world where boats of the same size carry so much sail; drawing at the same time so little water, that it is likely the smallest sudden squall will upset them. In the depth of winter, this passage may be made upon the ice; but it seldom happens that the sea is here sufficiently frozen before the month of February; as it requires many weeks of severe and uninterrupted frost to render it practicable for sledges drawn by horses, or even for hand-sledges. The boats are supplied upon the same plan as the post-horses, by a tax upon the Every parish is bound to contribute for this There are eighteen boats belonging to the purpose. Grissehamn side, and the same number in the Isle of Aland.

In the examination of the names of islands and places throughout the curious tract of land and water which intervenes between Sweden and Finland, it will be seen how necessary a knowledge of the language is to the illustration of the geography and natural history of this region, and to the explanation of some names in our own language.

VOL. VI. RR Among

Geographical Nomenclature.

CHAP. VIII. Among the innumerable islets with which the mouth of the Gulph of Bothnia is studded, appear as many names terminated by ö, as in the north of the same Gulph are terminated by \ddot{a} , pronounced like our o; yet these terminations have very different significations. Ö, pronounced like the French u, is very difficult to an English tongue, and signifies in itself an' island; whereas a, as it was before mentioned, answering to the French word eau, signifies water. Thus, in the names of the little islands in question, Aspo means the Isle of Asp-trees; also Korpo, the Crow-island; and Brando, either the Burnt-island, or the island whose shores repel the waves; for brand has two significations, one of which is 'to repel' or 'drive back.'. There are many other instances. Noto signifies the Isle of Cattle or Pasture. The Isle of Wardo. pronounced Vardo, means the Island of the Spring; and Uto, the Out-island, or Insula ultima. The Ferro Isles in the North Sea would be written Faro by a Swede; because the name implies Sheep Isles; and with them, Far means a sheep, and ö an island. Indeed, the name occurs thus written, Faro, in the Chart of a groupe of Isles south-west of Abo. In the north of Ireland, Fair Head has doubtless the same signification, being so called from the sheep there pastured.

Dec.

⁽¹⁾ A curious circumstance was mentioned to us in Norway, by Bernard Anker of Christiania, which is foreign to the present subject, but may be here noticed without interrupting the narrative. He told us that Great Britain holds the Orkney Islands only in pawn. Looking over some old deeds and records belonging to the Danish Crown at Copenhagen, Mr. Anker found that these islands were consigned to England in lieu of a dowry for a Danish Princess married to one of our English Kings, upon condition that these islands should be restored to Denmark whenever the debt, for which they were pledged, should be discharged. Therefore, as the price of land, and value of money, have undergone such considerable alteration since this happened, it is in the power of Denmark, ar a very small sum, to claim possession of the Orkneys.

Dec. 19. — This morning the Gulph was still impassable, from the violence of the gale, which was now contrary, the wind being north-east by east. Snow had fallen during the night. The mercury in Fahrenheit's thermometer fell at noon 21° below freezing. Towards night the wind veered to the west. Many persons arrived at Grissehamy, also waiting for a passage.

Friday, Dec. 20, proved an eventful day for all of us. It was the sixth day since our arrival at this wretched place; all of which time we might have spent much more ad-. vantageously in Stockholm, without delaying our progress. Early in the morning, before day-light appeared, our mariners, who belonged to Aland, and were impatient to return, came to summon us on board; saying the weather was more mild and the wind somewhat favourable, and that they wished to sail with all possible expedition. After what we had before experienced, it was wrong in us to venture a second time, without a certainty of a more tranquil sea; but it was much greater rashness to allow the carriage to be conveyed in the same boat. The Grisschamn and Aland boats are neither accustomed to the transportation of carriages, nor are they suited to their conveyance. The sight of our vessel, half filled with snow, in which the carriage, propped upon poles, yet rolled about with the slightest motion, reminded us of an old distich, not inapplicable to our present folly in venturing on board:—

"Seven men of Gotham
Went to sea in a bowl," &c.

Dangerous situation of the Author and his Companions.

We set sail. The morning was dark; and the shore here is so formed, that the appearance of the horizon and of the sea cannot be discerned until the land has been cleared. The sky looked fearfully red towards the east, and as fearfully black towards the west, in which quarter the wind was. We expressed our apprehensions to the boatmen; but they said that within four hours they could take us over, and that the wind would not increase within that time. Scarcely had we cleared the land, when we beheld a sea at which even our Alanders were appalled: at the same time it came on to blow with great violence, the gale gathering force at every instant. But the storm of wind was nothing, compared to the state of the sea; which having been agitated for many days, presented to our astonished boatmen mountains of boiling water. Nothing could more effectually convince us of our serious situation, than seeing the consternation of the crew. We begged them to put back, as they had done before. This they confessed they would gladly accede to, but that it was impossible: that all we could now do was, to bear up to windward, in the hope of making one of the Aland Isles, and avoid being driven into the Baltic. Within ten minutes after our danger became apparent, every hope seemed to Our Interpreter, as a seaman in the East-India vanish. service, had doubled the Cape of Good Hope, and often sailed in storms in the Atlantic Ocean, but he confessed he had never beheld such a sea as was here gathered in the Aland Haf. One of the Alanders, an experienced sailor, took the helm, and made his comrades lower the foresail. The mainsail could not be dispensed with, as we were falling fast to leeward; and without bearing

bearing to windward we must inevitably perish. We con- CHAP.VIII. tinued to luff from time to time; but when "the rising world of waters," in mountain-breakers, threatened to overwhelm us, the yells of all our boatmen became a signal to the helmsman to oppose to. it the stern of the vessel; and thus. letting her drive before the sea, to fall off to leeward, being carried into a gulph of foam, which broke over both sides of our boat, and covered us with the waves. Half drowned and gasping, we saw far behind us, when we were lifted upon the tops of the billows, another boat in equal distress; and this occasionally disappeared so completely from our view, as to make us believe she had foundered: but when she hove again in sight, she was so far to windward of us that there was not the smallest chance of our being able to reach her by swimming, in case of our being upset: and we afterwards learned, that she had entirely given us over, and had enough to do in baling the water, which filled on her leeside, to think of rendering us any assistance. The principal part of our distress was attributed, by the boatmen, to the having our carriage on board; and they reproached us on this Every time the vessel heeled, the weight and swing of this vehicle, propped high in the boat, made her ship more water than she would have done otherwise. We soon came to the resolution of consigning it, with all we had, to the deep, and gave orders to the men to heave it This was attempted; but they assured us we overboard. should sink the vessel in so doing, and abandoned the under-

⁽¹⁾ See the Vinette to this Chapter.

CHAP.VIII. undertaking. By cutting away, however, the props upon which the carriage was supported, we contrived to lower it upon the ballast, and the vessel laboured less in consequence. Still, however, the storm increased; and the sea washed over us continually. Huddled together near the stern, we could only trust to Providence, and, in the intervals when the sea left us, watch the countenance of our undaunted helmsman.

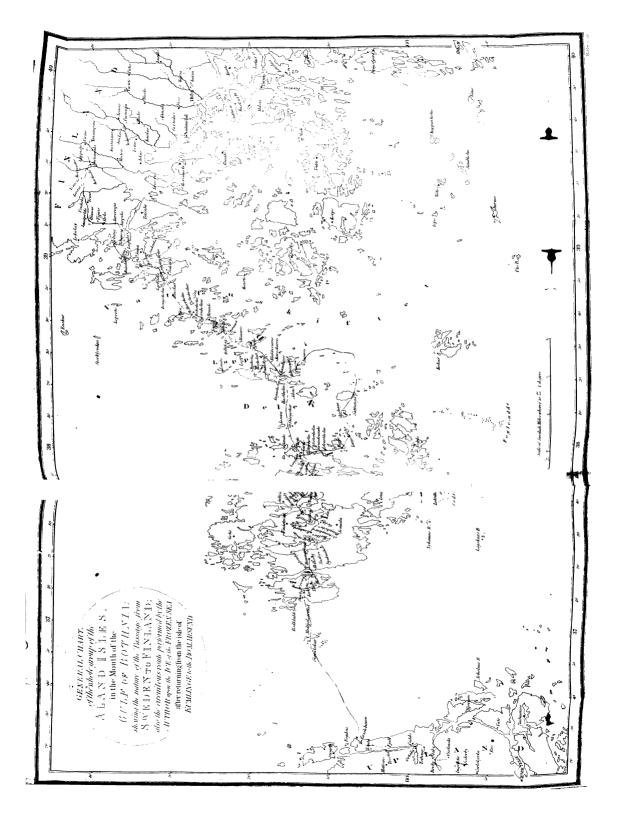
Providential escape.

After all, we knew not how our escape was effected, being quite stupified and benumbed by our dreadful situation. All that the author could recollect of the first glimpse of hope was, that, after long struggling in endeavours to recover the vessel's lee-way, the island on which the Aland Telegraph is stationed appeared at a great distance to leeward, under the boom of the mainsail. Soon afterwards, getting another island to windward, the sea was thereby rendered somewhat more tranquil, and the boatmen set up a shout, saying, "Bra! Bra!-Ingen fara! Det har ingen fara'!" After this we sailed through the Sound', and close to the shore; but could not land on account of the surf. Having passed these islands, we steered for Ekerö, the sea being much more calm; and arrived there soon after mid-day. The crew of the other boat met us, and hailed our coming. It consisted of a party with the Ostero-Bothnia mail, and a Swedish navalofficer, who told us he had no expectation that we should have weathered the storm, seeing the manner in which

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^{.. (1)} Bra! is an interjection answering to bravo! The literal meaning therefore is, "Bravo! Bravo!—No danger! There is no danger!"

⁽²⁾ See the Chart of the Aland Isles.



our vessel laboured. His own boat had encountered consi- CHAP. VIII. derable danger; but it was less burdened, and much more manageable, and had otherefore been held in her course. without being driven, as was the case with ours, continually into the trough of the sea.

We had no sooner landed in ALAND than every thing Aspect of wore a new face. The winter had set in, and with great landing upon rigour; the ground was covered with snow, and sledges were already in general use. As our carriage was still upon wheels, we were compelled to take six horses, and with these we proceeded at a tolerable rate. We reached Prebbenby that night. The inhabitants are a stout and hardy race, better clothed, and in all appearance wealthier than the Swedes on the western side of the water. The inns are clean; and we observed no symptoms of scarcity. It was, to be sure, the season in which provisions are most abundant, having been collected for the winter store; and we were able to lay in a fresh stock for our own use. We found here Pontac wine and ale, with plenty of cold meat, which the frost preserves. The ferries were all frozen up. We crossedan inlet of the sea on foot, and our heavy carriage was drawn over it upon sledges. Of the state of agriculture, in a country entirely covered with snow, we could not well determine, from our own observations. This island produces but little corn; consequently, the natives depend chiefly for their means of subsistence upon their fishing excursions. They exchange a small species of herring, called Strömming, with the Swedes for corn: they also pasture a very considerable quantity of cattle. The land is level, and inclosed in many parts.

netweet of

CHAP. VIII. parts. The trees are small and low, and, at this time, were almost buried in the snow, which covered every thing. In the evening, our inn at Frebbenby was filled with travellers, wrapped in pelisses, and smoking tobacco. Among others, there arrived from the Finland side a Russian, Colonel Rebinin, with express despatches from the Emperor of Russia to the Court of Stockholm. He spent the evening with us, and gave us the first specimen of the lofty tone and swaggering airs which so strongly characterize all the agents of the despotic Government to which he belonged. said he, the commands of the Emperor, my Master, to the King of Sweden." He seemed to consider obedience to those commands, of whatever nature they might be, as a matter of course. As we had not then undergone any Russian discipline, we were not yet tamed into an implicit assent to Russian notions and opinions; and this minion of tyranny could not avoid noticing the freedom with which, in our conversation, we delivered our sentiments. He spoke much of the tranquillity and happiness of despotic Governments: and said that Great Britain would be ruined for want of rigour. Above allathings that had tended to lower our country in the eyes of other nations, he considered the Expedition to Holland as the principal. He called it puerile and disgraceful; and maintained (with a degree of warmth that shewed he was more interested in it than as a mere topic of discourse) that it had exposed England to the ridicule of the world. At last, it came out that he had served in person upon that occasion, when our allies, the Russians, were roughly handled; all of which he imputed (to use

one of his mildest expressions, "to the imbecility of our CHAP.VIII. Commander-in-chief." The only English officer of whom he spoke in terms of any approbation, was General Abercrombie. And as the anecdotes which he related pass current at the Court of Petersburg, we shall mention one; omitting the terms of contumely in which, according to his account, persons of the highest distinction in our army are always spoken of at that Court.

"The Russians," said he, "occupied the centre of the allied armies. Upon one occasion, they received orders from the English head-quarters to attack the French at nine o'clock on the following morning; and were told that the English in the right wing were to second this operation. The attack was made, and the French were repulsed; the Russians afterwards waiting the promised aid of the English troops, which did not arrive. 'Couriers were accordingly despatched, right and left, to bring up the English army. At this juncture, the French, having received reinforcements, renewed the engagement, and repeatedly attacked the Russians with fresh troops. From nine in the morning until four in the afternoon the Russian army was thus exposed, and suffered severely. At four o'clock. General Abercrombie arrived with the troops under his command, fought with his wonted bravery, and repulsed the enemy: then going up to the Russian General, he burst into tears, saying, "You must think me a poltroon and a traitor; but, by my grey hairs and by these tears, I declare I was kept in ignorance of your intended attack, and had to assemble and to fally my men after your messengers brought me the intelligence."

CHAP. VIII.

We have inserted this as a specimen, because it came fresh from the Russian Cabinet; suppressing other equally fair and candid representations, which we also heard, and which were bandied about, to the disadvantage of our countrymen at the Court of Paul. The want of success in Holland was imputed by all the Russian staff, who were present, to the inefficiency of the English in military tactics. They affirmed that England had no land troops; that the display of English infantry was a wretched farce; and that the officers were worse than children. Colonel Rebinin, in whom this language and these sentiments were but the echoes of the Russian Government, considered the truth of his assertions as proved by the very different success of the Russians when in Italy. "In Holland," said he, "we had the best troops from the Emperor's dominions—the grenadiers; all of whom were veterans, and every soldier was a hero. Those sent to Italy were the refuse of the army; and with these Suwarof almost wrought a miracle. Depend upon it, whenever Russia is called upon to act in concert with an English army, the remembrance of the treatment she experienced in Holland will, at least, make her cautious"!"

The next day, Saturday, Dec. 21, after our carriage had passed the ice piece-meal, it was put together again; and we set out with six horses from Frebbenby, about ten o'clock.

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⁽¹⁾ Russia has since shewn her caution, and redeemed this pledge. But it is grateful to reflect upon the lesson which the subsequent victories of Great British have taught to the caution of the Russians; who, in the triumphant march of our heroes to Paris, followed in the rear of our army, assumere leokers on; not having contributed, in the smallest degree, to the glorious issue of our contest with France.

The roads were well tracked, but our wheels could hardly be CHAP.VIII. made to turn round. We passed through forests and a level country to Enkarby, where we changed horses; and proceeded to Haraldsby, passing a ferry about a quarter of a mile from the latter place. Here, finding the rooms clean. and comfortable in their accommodations, we halted. Our host brought some excellent Pontae wine, which he offered tor sale; but there were no bottles for its conveyance. Tahrenheit's thermometer this day, at noon, was twenty-two degrees and a half below freezing.

We left Haraldsby on Sunday morning, Dec. 22, at ten o'clock, and soon after arrived at Castelholm; so called from Research the little insular rock whereon the ruins of a fortress are situate, in which Eric XIV, was confined. We approached it by a bridge. It is a building of considerable grandeur, and marvellous, considering the age in which it was erected, when even the palaces of Sweden were nothing more than log-houses. was built with rude masses of a beautiful red granite; but the remains of the windows and parts of the walls are of brickwork, which appear to be of later date than the original structure. The terra-cotta of the bricks is in itself a curiosity: the most beautiful baked clay of the vases of Nota in Italy do not surpass it, so pure and homogeneous is its texture. Its 'colour is of the brightest vermilion; and the bricks, which were evidently shapen, by the hand without moulds, seem as if they had been formed of the most plastic wax or butter. The people here are very superstitious: they speak of ghosts as trequently seen about this castle. Upon the top of the Ruins they shewed to us an apple-tree, which yielded fruit during

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because no one would venture to gather it, or even to touch it. They pretend to shew the room in which Eric was incarcerated: and strange tales of dungeons and mysterious passages, leading no one knows where, are of course connected with the narrative related to every stranger who visits these Ruins.



Some Gentlemen, instigated by the curiosity thus excited, were at this time digging in the court of the castle; and had discovered a subterraneous duct, somewhat like a passage, the course of which they were endeavouring to explore; but hitherto it had led to nothing. This famous fortress has been several times consumed by fire, and as often rebuilt. Notwithstanding its importance in Swedish History, it is seldom mentioned by any author; and it

is now sinking fast into a state of oblivion. The granite CHAP.VIII. materials of its walls are those of the rocks and islands The very rock on which it stands is of red around it: granite. It is everywhere surrounded by water, save only a narrow tongue of land which connects this rock with an adjoining island. As it is not likely that it will ever be restored, we made the annexed sketch of its present appearance. It was built by Birger Jarl, father of Waldemar, in the thirteenth century. Afterwards it became the residence of the Governors of Aland, and continued their place of habitation until the year 1634. During the reign of Henry of Pomerania, called Eric, in compliment to the Swedes, by Queen Marguerita, this castle was inhabited by a foreign lady of the name of Yda'. Under Eric Pucke, it was, in consequence of his orders, reduced by John Folkensen. According to Puffendorf, that prince laid siege to it when Otto Pogwisch was Governor of Aland, who yielded up the fortress upon the King's approach'. The year when this event happened (1434) was rendered memorable for the curious watch-words used by Englebert of Fahlun, in distinguishing foreigners from the natives, when able in other respects to pronounce the Swedish language'. In 1505, Castelholm was given by the Regent, Suante-Nilson-Sture, to Eric, son of John Vasa.

⁽¹⁾ Acerbi's Travels, vol. I. p. 189. Lond. 1802.

⁽²⁾ Hist. de Suède, tom. I. p. 186. Amst. 1743.

^{(3) &}quot;Engelbrecht donna a ses gens deux mots pour pouvoir distinguer les étrangers, des originaires du Pais. Ces mots étoient, Huid-hest et Korngulft:" de sorte que l'on faisoit main-basse sans aucun quartier, sur ceux qui ne pronongoient pas distinctement ces mots-là." Ilid. p. 187.

CHAP. VIII. Vasa, and father of Gustavus the First; and in this year it was burned by the Danes: but being rebuilt, it became the prison of Eric XIV. in 1571. In 1556, it was granted, with all the Isles of Aland, in fief, to Duke John. Afterwards, in 1603, it devolved to Catherine, wife of Gustavus Vasa. In 1644, it was again desolated by fire. Then it became the property of Queen Ulrica Eleanora, the consort of Charles XI.; and. having subsequently undergone various fortunes, is reduced to its present state of ruin and decay. The only use now made of it, is as a magazine for containing corn belonging to Government; for which a tax is levied upon the Alanders. and collected in kind.

Skarpans.

After we had gratified our curiosity by seeing these Ruins, . we continued our journey to Skårpans, distant only about nine English miles from Frebbenby, and proceeded no farther this day; being compelled to leave our carriage, which was too heavy to be conveyed upon the ice in its present state across the passage of the Bomarsund: we therefore entrusted it to the care of the Commissary; and hired what is here called a Rack, viz. an open sledge with two seats. The inn at Skårpans, like almost all we have seen in Aland, was clean and good; but we were grieved to remark, that in proportion as we drew nearer towards Finland, we had fewer opportunities of observing that honesty for which the Swedes are so remarkably distinguished. The peasants in Aland all

Change in the Manners of the People.

aim

^{(1) &}quot;Ils entrerent dans la Finland, où ils brulerent Aboo: ils firent le même traitement à la Ville de Castelholm dans la Province d'Aland." Hist de Suède, p. 296.

aim at imposition; and the practice of cheating strangers is CHAP.VIII. common to all the inns upon this route. We had no sooner reached Skarpans, than we began to notice this change in the manners of the people. The Commissary had been sent for, to attend the trial of a woman and her accomplice for murdering a pedlar. The poor man had been persuaded to accompany this female to her cottage; and there they murdered him, burying his body under the floor. A century would elapse in Sweden without any similar stain upon the annals of the country. The mode adopted in this country to extort confession from criminals—torture being never practised—is simply confinement upon a diet of bread and water for a certain length of time; which is said to answer the purpose.

Monday, Dec. 23, we left Skarpans, to cross the Romar-Bomarsund. sund in the Rack; being drawn across the ice by men, in the kind of sledge so called. As soon as we had passed, horses were ready for us, and we continued our gliding progress through the forests. Whenever the inlets of the sea occurred, as the ice was not yet strong enough to bear horses, the peasants harnessed themselves to our sledge, and drew us over the water. In this manner we at length reached the Vargatta Sound and the Isle of Vardö, and came Vargatta to a little village, consisting of wretched wooden huts, a number of small windmills, and a church: In passing the Vargatta Sound we had an amusing but very striking proof of the immense power and influence of the Russian name in these parts; as testified in the marks left in the ice by the simple passage of its Courier, Colonel Rebinin, whom we had

CHAP.VIII. seen at Frebbenby. Being told, upon his arrival at Vardo, that the Vargatta Sound was frozen up, and that he could not pass until the ice should become stronger, he reproved the peasants for presuming that any thing had power to stop an express Courier of the Russian Cabinet: and immediately ordered a passage to be opened; telling them to cut a way through the ice, large enough to admit the passage of a boat; and this merely for the accommodation of a single individual. These men obeyed his orders: being well paid for their work, and well supplied with brandy; they actually effected the undertaking; and the Colonel passed in his boat, by means of the channel thus laid open. We saw the marks of this undertaking, extending for many English miles through the ice, as through a solid rock, in this inlet of the sea.

Sledge-travelling.

The first day of our sledge-travelling convinced us of the folly and inconvenience of being pent in close carriages, when performing a winter-journey in such a climate. Never was any mode of travelling more delightful than this of the open sledge. In the carriage, we were always complaining of the rigours of the temperature: in the sledge, although exposed to the open air, we found no inconvenience from the utmost severity of the frost. The atmosphere was so clear and dry, that, being well clothed, the effect of it was charming. An intensity of general cheerfulness seemed to keep pace with the intensity of the season. Brilliant skies; horses neighing and prancing; peasants laughing, and singing—"Fine snow! brave ice! brave winter!" Merry-making in all the villages. val days, with unclouded suns; nights of inconceivable splendour

splendour and ineffable brightness; the glorious firmament CHAP. VIII. displaying one uninterrupted flood of light, heightened by an Aurora Borcalis, while boundless fields of snow reflected Add to this, the velocity with which the sledgedrawn traveller is made to fly over sea and over land; over lakes and over plains; amidst islands and rocks; through snowy groves and forests bending with the weight of glittering icicles; here winding through thick woods, there at large upon the solid main-" DURUM CALCAVIMUS ÆQUOR;"-in the midst of scenery so novel, but withal so pleasing in the richness, the variety, and the beauty of the effect. The snow too, in itself, is not one of the least of the wonders; for though it be not seen to fall, it gradually accumulates. It was now eight inches deep, and we had not observed a single instance of its descent. From the extreme diminution of temperature in the air, the condensed vapours were frozen into particles so minute, that, without adhering together and forming flakes, they passed imperceptibly through the clear serene atmosphere, in the state of an invisible sleet; which, when agitated by wind, rose from the ground in the form of a fine powder and seemed as dry as the dust of the desert.

When we arrived at Vargatta, in the Isle of Vardo, we were informed that, at the distance of half a Swedish mile from the village, there was a boat waiting to take us to Kumlinge; the sea being open on that side of the island; and that two Gentlemen, with whom we had shared our accommodations the preceding evening, were desirous to return our civility by providing for our passage thither. When we reached the spot, however, they were gone: and as there was no vol. VI.

CHAP. VIII. other means for our conveyance, we were under the necessity

of returning to Vargatta, where we put up for the night in a wretched and filthy hovel, the first of the kind we had seen since we left the Swedish coast. Nothing in Lapland could be worse: yet the poor owners of the hut called it a "Bra Kammare;" and we did not wish to make them believe that we were discontented with our accommodations. The evening of the following day, Dec. 24, being Christmas Eve, which in Aldnd ushers in a night of great festivity and rejoicing, our boatmen, who were to conduct us in the morning to Kumlinge, came to beg that they might start before daylight, lest they should not be able to get back to Vardo, to share with their families in the Christmas revels. At four o'clock A.M. the shouts of these men summoned us, nothing lothe, to quit the miserable place where we had passed the night; and we hastened with them to the shore. To their disappointment, the wind was directly adverse; and they were forced to pull with oars the whole way, which threatened to delay their return. About two Swedish miles, however, from Vardo, they descried, to their great joy, the Ostero-Bothnia post-boat, coming full sail towards them. Upon this they set up a great shout—"Ostero-Post! Ostero-Post!'. and, waiting its coming with great eagerness, asked our permission to exchange cargoes. The men in the other boat were equally eager to get back to their own island, and for the same reason—to keep the festival of Christmas Eve. As soon, therefore, as the two parties met, the exchange was But the author, hearing from the Kumlinge boatmen that the Lappvesi Channel, in the passage towards Abo,

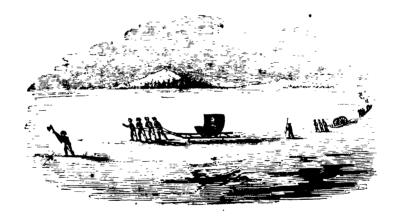
The Party embark across the *Delen* for *Kumlinge*.

was open—which had been reported as frozen over, and the CHAP. VIII. wind being fair for Vardo, determined to leave his companion The author with the English servant to proceed to Kumlinge, and return return to with the Vardö boatmen and the Swedish interpreter for the carriage which had been left, with almost all our effects. beyond the Bomarsund. With this view he set sail again for Vardö; where, taking guides, he crossed again the Vargatta Sound, and the Bomarsund, upon the ice; and arrived again at Skarpans at four o'clock in the afternoon; at which hour it was quite dark. The guides had expressed their fears, the whole way, of not being able to get back for the feast. Hearing this complaint so often repeated, the author asked what it was that they were to enjoy, which they deemed so desirable; and was answered, "A belly-full of brandy!" Christmas Eve, however, is kept all over Sweden and Finland Festivities of with peculiar circumstances of festivity. The people, even Eve. the lowest and poorest of the inhabitants, join in the general conviviality; those who can best afford it, inviting the rest; so that no one is omitted.

Skårpans.

The next morning, that of Christmas Day, having assembled twenty-five of the peasants, provided with poles, ropes, and axes, and having placed the carriage upon four sledges, we began our expedition across the Sounds. The difficulties we expected to encounter seemed to vanish as a dream: by half after ten, A.M. the carriage, followed by sledges bearing the axle, wheels, trunks, and baggage, together with the whole of our party, had safely passed the Bomarsund, and all the inlets of the sea before arriving at the Vargatta, the largest field of ice we had to go over. Here we diminished the number

to four; as the ice was more likely to give way in this passage: and we allotted the same number of men to the sledge conveying the axle; suffering only one sledge to proceed at the same time;—all the rest following cautiously at a distance from each other, and all being drawn by men instead of horses. Then, by sending forward a single peasant with a large and heavy axe to try the strength of the ice in all places where there was danger to be apprehended,—and taking each of us a rope, to animate the men,—we set out.



Sometimes we were forced to deviate a little from the straight line of our route, in consequence of open places through which the sea appeared, and also when warned, by our pioneer, of thin ice giving way to the blows of his ponderous axe: but by half after eleven the entire train of our sledges had cleared all the passes. We then went up to the village of Vargatta, to hire horses for conveying our different burdens by land about five English miles beyond that village to the sea-shore of the passage to Kumlinge, where the water was open. By

one o'clock the whole retinue had reached Vargatta; whence CHAP. VIII. we set out again; and, after crossing a small lake, continued our progress, through a forest, to the sca-side, where we found an inlet so frozen as to bear the passage of the carriage &c. to a rock, from which with little difficulty it might be put into one of the boats on the following morning. Having conveyed the carriage to this rock, it was supported upon the top of it by means of poles applied to the sides, together with the axle, wheels, the imperial, and several trunks. Night now came on; and, as it was necessary that some one should remain to guard our effects, we hired a peasant for this purpose, and allowed him to remain sheltered by sitting within the carriage. No sooner had we closed the door upon this man, and consigned him to his post, than, as if at one explosion of a tempest, a strong north-cast wind, accompanied by the first snow we had seen falling, came on to blow with stormy violence. felt very indifferent, little thinking that this gale would put a stop to our projects for the next day; and getting into a sledge, were conducted back to Vargatta, rejoicing in having, as we imagined, so completely secured the conveyance of the carriage to Kumlinge; whence we might proceed, without further interruption, to Abo, in Finland. -The sequel will shew how greatly we were deceived.

In the morning, the wind, which had raged like a hurricane all night, blew with undiminished violence. Our mariners refused to stir towards the sea; alleging that the boats would fill and founder, even before they could get from the shore. An Extra-post arrived: and as the peasants conveying

that nothing could be done. The whole of this day, Dec. 26, and the following night, the same tempest continued with unabated fury: but about six o'clock on the morning of Dec. 27, having continued for thirty-six hours, it ceased as suddenly as it came on. The interpreter had been sent, on the preceding day, to ascertain the safety of the carriage and other effects upon the rock, and also to report the state of the sea. He returned, saying that all was well; that ice had accumulated along the coast, to the distance of about three boats' length from the place where it was proposed we should embark; but that if the storm did not remove it before morning, it would be no difficult matter to cut through it.

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terior of Āland velling.

Before daylight appeared we proceeded to the little village of Vardö; whence the island so called is named, and where the Post-house is situate. As we entered the hovel called the Post-house,—for we can give it no better name,—we were told that the Extra-post messengers were not yet come: we therefore had to wait for their arrival: and this delay gave us an opportunity of seeing a little of the interior economy of one of these dwellings, in its most undisguised state. A more curious sight could hardly be imagined. At our entrance, nobody was up. The members of the family held a conversation with our boatmen, but we saw none of them. The floor of the only room they had, and of which we had taken possession, was covered with straw and sedge, according to the custom of the country at Christmas, and once a practice, even in Kings' houses, in England. Peeping from behind their hiding-places, as soon

as they perceived that strangers had entered this apartment, CHAP. VIII. they were all stirring: and presently there fell out from every side of the room the naked figures of men, women, boys, and girls, who had been piled in tiers one above another, as in a ship's cabin; being concealed from view by so many sheep-skins, which were suspended as curtains before their cots. This motley groupe, amounting in all to thirteen persons, without a rag to cover them, squatted themselves upon the floor in the middle of the chamber. and began altogether the business of their brief toilette. The women put on two pairs of woollen hose, and over these a pair of greasy boots. The toilette being ended, they all with one accord began to blow their noses into the palms of their hands, and to wipe them upon their clothes. Then the men kindled their tobacco-pipes; and a universal hawking and spitting commenced. Nor were the women unoccupied; for a large fire being lighted, the females of the family quietly took up their petticoats, and sate before it, very leisurely gartering their stockings. This being done, a girl Breakfast of now handed round their breakfast: it consisted of, first, a dram to each person, served in a small silver cup; secondly, a portion of black biscuit, with about two ounces of fresh butter. At this meal they sate without ceremony or order, each where and with whom he pleased, chatting and laughing in groupes, apparently contented and happy. It was rather new, to see mothers with children at their breasts disengage their tender infants from the nipple, to pour down their little throats a portion of the dram which came to the mother's share; but still more remarkable to see these young

THAP. VIII. dram-drinkers lick their lips, roll their eyes about, and stretch out their puny hands, as craving more; shewing how accustomed they were to this beverage. Perhaps the practice may explain the frequency of dwarfs in the Northern countries of Europe; as in Poland, Russia, and Sweden. But the author, venturing a mild remonstrance upon seeing an affectionate mother pouring brandy down her child's throat, was told, "It is good for them: our children are not troubled with wind or with rickets; and our adults," giving one of the sturdy peasants a notable thump, "see how hardy and healthy they are!" There was no reply to such an appeal; for of the Alanders, in general, it may be said, that a more vigorous race can hardly be found; and all of them have imbibed with their milk their morning drams of brandy. It is in scenes like that which the interior of this hut exhibited, the mind is forcibly struck with a conviction of the relative nature of human happiness; that it belongs to no rank or situation in life as a peculiar possession; but that in all stations, gifted with health and virtue and just government, Providence has vouchsafed an equal portion of this blessing. As certainly as the poor native of St. Kilda, torn from his bleak and barren rock in the Atlantic, would pine and die through languishing for his home, although transported into a land of luxury and abundance; so would every individual of the groupe

^{(1) &}quot;He longed to see his native country again." - Martin's (Account of a St. Kildian brought to Glasgow) Western Islands of Scotland, p. 298. Lond. 1703.

groupe here assembled refuse to exchange his morning CHAP.VIII. whet, of black biscuit and brandy, for the choicest dainties cities and towns might offer.

The peasants appointed to convey the Extra-post now entered, and the little hut was full of company. "God dagen! God morgon!2" being exchanged on all sides, we somewhat eagerly interrupted the etiquette, by asking if they were ready to put to sea? "Ready enough!" was the answer, "if we can put to sea! But we have heard nothing of the sea, as we came along; and therefore we think the sea is frozen."—"What!" said the author, "in one night? Impossible!"—"Come along with us, Sir! we shall quickly learn the truth." And with this we all hastened out of the hut, got into our sledges, and made towards the shore. What was our dismay and astonishment, as our sledge cleared A tachat ac the forest through which we were driving, and the view one angle opened towards the east, to behold the sea, as far as the eye could reach, with its rough waves fixed, and all its rocks and distant isles locked in one wide field of ice; while, at the same time, the chilling exclamations of all our boatmen, crying out, in equal amazement, "Gud bevara! Gud bevara!"" announced that every hope of getting to Kumlinge was at end for an indefinite length of time. The ice of the sea, when it first fixes, is so rotten, that no one dares to venture upon it, until a sufficient degree of hardness and solidity

^{(2) &}quot;Good day! Good morning!"

^{(3) &}quot;God save us! God save us!"

THAP.VIII. solidity has been given to it by a subsequent freezing of the water below the surface. This, of course, happens sooner or later, according to circumstances. In the passage between Grissehamn and Ekerö, it sometimes does not occur during a whole winter, although the sea seem covered with ice. On venturing a little way from the shore, to try the strength of the ice, we found even the roughest parts of the surface vielding to our feet, like a soft sop. All this had been occasioned by the fall of snow upon the evening of our arrival with the carriage. From what we learned afterwards, and from the information the peasants gave us, it was evident that nothing tends so effectually towards the freezing of the sea as a fall of snow into the salt-water'. At this time of the year, when the temperature is nearly that required to effect the freezing up of these passages, a fall of snow is sure to bring this to pass; although an instance had seldom occurred in which the wide opening between Vardo and Kumlinge was thus suddenly rendered solid. Near the shore, it seemed to have been the work of an instant; the waves being caught by the intensity of the frost, and fixed upon the surface in all their undulating forms. Further out, where there had been less of surf, the ice was more level; and, perhaps, if we could have reached it, at this distance from the land, possessed much greater solidity and firmness. What the temperature had been this night, we did not ascertain; but the visible effect of such a frost, in the sudden change

⁽¹⁾ A more particular description of this effect, as produced by the mixture of snow with sea-water, will be given in the sequel. The well-known freezing mixture of snow with common salt acts upon the same principle.

change it had wrought upon a turbulent sea, is sufficient CHAP.VIII. to prove that the mercury must have fallen much below the zero of Fahrenheit's scale. At noon this day, it rested exactly at that point; being thirty-two degrees and a half below freezing.

In this dilemma, the only resource left, was to rely upon the exertions of the peasants conveying the Extra-post;—men who have undertaken a charge of this nature being compelled to proceed at all hazards, if there be a possibility of their making way. They said they would attempt to cut a passage into the open sea, two miles more towards the south. We accompanied them in this undertaking: but after driving a sledge for fourteen *English* miles over ice and snow, the project was abandoned.

The situation in which the author was thus placed was by no means enviable: and as he turned back once more to his wretched accommodations at Vargatta, the consciousness that his friend and companion was left, by his management, upon a bleak and inhospitable islandcut off from all connexion with any one who could converse with him, and procure for him the common necessaries of life - added to the bitterness of the disappointment. On the author's arrival, the people of the place, anxious to render every kind office which it was in their power to bestow, crowded about him, proffering their services in any way that might be useful. They assured him, that, if the frost held unbroken, it would not be long before they might all walk to Kumlinge: adding, that in the preceding winter the ice first began to spread over upon a Wednesday,

HAP. VIII. a Wednesday, and that upon the following Saturday they made the passage in their sledges. In this solitary state, not knowing what course to pursue, the author determined to recross the Bomarsund, and take up his abode in the first place of lodging he could find, where he might wait the event. For this purpose, after again passing the ice, and landing upon the south-east part of the island, he went to a small inn about three English miles and a half from the shore, where he resolved to remain until a passage might be attempted to Kumlinge.

outhern issage to um/inge-

There is what is called a south passage to Kumlinge, sometimes attempted when the ice is thin, although more than double the distance of the other. The islands in that route being more numerous, and the straits narrower, travellers are sometimes able to effect a passage here, when the other is impracticable. If they be able to accomplish it, they generally employ two days in the undertaking. Then they take a small boat with them; dragging it along where the ice will bear, and forcing a way through where it yields. Three years ago some peasants attempted this passage, with a party of travellers going to Kumlinge; and they reached that island in safety, after very great fatigue: but these poor peasants, in returning, having laboured until they were quite exhausted, found their boat locked into the ice, at a great distance at sea; and were unable to quit the vessel, the ice not being strong enough to bear them. Fortunately they had a frying-pan in the boat, in which they kindled a fire; consuming for fuel every thing combustible they could lay their hands upon, even to the oars of their boat. Despair and hunger at length emboldened them to venture forth, CHAP.VIII. the frost becoming exceedingly severe; when, after many trials and hardships and hair-breadth escapes, they were fortunate enough to reach the shore.

Upon Dec. 28, the author sent the Swedish interpreter to Vargatta, and to the eastern coast of Vardo, to examine the state of the sea. He returned in four hours, having ordered a sledge to be constructed in Vargatta for the better conveyance of the carriage. He brought the welcome news, that the peasants having examined the state of the ice with a telescope, were convinced of its reaching, in one unbroken field, the whole way to Kumlinge; distant from the Isle of Vardo twenty-one English miles. He also added, that, upon the following day, a peasant would endeavour to walk over the Delen, with a letter. This intelligence, although it proved delusive, excited considerable hope in the author's mind of being released from his present state of durance. A wolf had passed close to the house in the night, and had left very visible marks of the track he had pursued. The peasant to whom this dwelling belonged, sallied forth in pursuit of the wolf, armed with his gun; and the authoras the man promised to shew the way to some rocks where he said crystals might be found—accompanied him upon this expedition. In the forest there was neither wolf, nor bird, nor living creature to be seen; but the tracks of wolves and hares were visible in the snow. The rocks in some places under the trees were sufficiently bare to exhibit their geological nature: they consisted of a beautiful granite: Geological

CHAP. VIII. Aland; either as simple minerals in a detached state, or combined in an aggregate rock: of this there are many examples. Detached masses of mica and of hornblende may be observed among the building materials in the Ruins of Castelholm. The beautiful clay of which the bricks in that fortress were manufactured, may have originated in decomposed feldspar. Masses of pure quartz, of feldspar, and of hornblende, also present themselves; together with every variety of association which these different minerals can exhibit. The crystals which the guide had mentioned were by him pointed out: they proved to be common hexagonal crystals of quartz, in a matrix of quartz and brick-red feldspar. The granite of Åland occurs in compact masses, lying perfectly horizontal, and without any appearance of dipping or inclination: it breaks readily, and near the surface exhibits the marks of decomposition; sometimes shivering in its fracture, like trapp.

> Dec. 29.—Sent a peasant to examine the state of the sea; who returned with the disagreeable news, that the Delen was not completely frozen over; and that the Extra-post still remained unable to proceed.—Determined therefore, at all events, to attempt a passage on the following day, by the circuitous southern route.

Manners of the Alanders in winter.

The manners of the people in Aland, during the increasing severity of the winter season, shew what erroneous notions we are apt to entertain of the lives and customs of the natives of these northern regions; where imagination pictures a dreary scene, with all its inhabitants close pent in their dwellings, like hibernating animals, sleeping throughout the

winter.

winter, and anxious only to guard against the rigours of the CHAP.VIII. frost. The fact is quite otherwise: they are all abroad, in a state of the most lively activity, and of easy revelry. They are not, it is true, engaged in labouring for their bread, but in consuming what they have acquired by their industry during the summer. It is, with them, the season of visiting and travelling to the most distant markets. The roads are full of passengers of all sorts and ranks, from the itinerant shoemaker and tailor, to the diplomatical agents and messengers of Court Cabinets. The coming into a family circle of the wandering botchers of tailors and jobbing coblers, which always happens at this time of the year, is an event of great importance. These men travel from house to house; staying as long as they find employment, and then sallying forth in search of more work: consequently they are the bearers of all the news and gossiping tales of the country how folks live and thrive in the neighbouring isles; what girls have found husbands; with all the rest of their budget, of births, deaths, accidents by fire and water, tales of apparitions by land and sea, bankruptcies, jokes, and scandal. While they remain in a house, they become members of the family, who entertain a regard for them as friends always welcome, and generally dismiss them with regret.

The inhabitants of the Aland Isles amount to between Number of five and six thousand. There are nine hundred families: and allowing, upon an average, six persons in each family, the number will about equal what has been stated. The agricultural produce of the land is trifling; but they carry on a considerable trade in several kinds of fish, which are

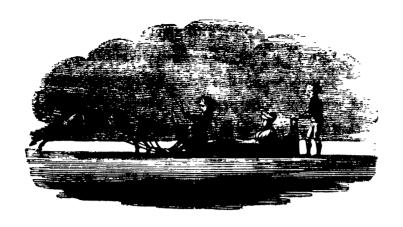
carried

CHAP. VIII. carried in well-vessels, and fatted in reservoirs at Stockholm. The first dish at table, in almost all Swedish families at Stockholm, is a small fish called stroemling, which is reckoned a great delicacy: it is eaten generally with vinegar. Abundance of the stroemling are taken by the Alanders in their fisheries; they also take a great number of seals. Their fish they exchange for corn, both at Stockholm and Upsala. They are supplied from Stockholm with two sorts of beer: one of which is brewed in imitation of English porter, and is a most detestable and unwholesome composition: the other, a more simple beverage, has a fault common to all the Swedish beer, that of not being boiled enough when it is brewed. The land in Aland presents to the eye a gently undulating surface, full of rocks, intersected by numerous bays, sounds, and inlets of the sea, which seem like large lakes, and covered in part with thin and low forests. Beggars, so rare in Sweden, are very common here. The best-conditioned inhabitants are the Clergy. The innkeeper at Skarpans possessed twenty cows, yet this man was nothing more than a peasant. The poorest of the peasants keep cows, because they have the free pasturage, or rather browsing, of the forests during summer; and in winter they are housed and fed upon such fodder as these islands very plentifully produce—hay, birch-boughs, and the leaves of other trees. In the winter, the cows are let out to be watered and fed; being fed three times a day morning and evening in their stalls in the cow-house, and at noon out of doors. The joy of these poor animals, when the moment arrives for their being brought out into the

open air, is so great, that they disregard even their food, for CHAP. VIII. the delight of rubbing themselves against the rails, and butting against each other, during the half hour that they have their liberty.

Among the better-conditioned inhabitants, besides the Land-meu-Clergy, there are a set of men called Land-measurers, found destructive all over Sweden, depriving the natives of their property, and depredations. creating more mischief among the people than twice the same number of Country Attorneys would do in England. perhaps be difficult to give an accurate idea of the power and influence of these harpies in Sweden; nor is it possible to conceive a class of men calculated to cause more real evil in any country, or to prove more oppressive. The land of the peasants, although inclosed, is frequently so divided, that a number of small strips or portions of it, belonging to different individuals, may be contained within the same As the only distinctive boundary in such inclosure. cases is a land-mark—such, for example, as a small trench dug in the earth, or a stake driven into the ground-it will often happen that these marks disappear; and encroachments being made, disputes begin among the farmers, as to the limits of their property. Upon these occasions, an appeal is immediately made to the Land-measurer, who takes care to fleece both parties before the business But the mischief does not end here. rapacious Land-measurer is a man of luxury, of profligate and voluptuous manners, keeps a good table, invites his friends, drinks and sometimes plays deeply—and, to support the extravagance of his establishment, money is absolutely VOL. VI. $\mathbf{x} \mathbf{x}$

CHAP. VIII. absolutely necessary. To obtain this, therefore, he hints to a peasant that his land has not been fairly laid out, and that it may be more profitably arranged for him;—at which his neighbour becomes irritated. A dispute ensues, which is artfully fomented; the Land-measurer receiving bribes from both parties. Each tries to injure the other, and is ready to lavish the half of his property to satisfy the vengeance thus excited;—the property of the one being encroached upon exactly in the proportion that the other is able to feed the avarice of the pretended mediator; who carries on his schemes, until he has exhausted, and perhaps ruined, one or both of the disputants. In the interior provinces of Sweden, if a house be seen better than common, or a carriage or a horse cut a better figure than usual, it is generally the property of a Land-measurer. Prowling about, like wolves seeking whom they may devour, the very coming of these men among the Swedish farmers always prognosticates calamity: and it is surprising, that, in a country so prone to revolution and change of system, these injurious plunderers and disturbers of the public peace should have been so long allowed to carry on their depredations.



CHAP. IX.

CIRCUITOUS JOURNEY ON THE SEA, TO KUMLINGE.

The Author determines to undertake the Southern Circuitous Route-Introduces his Personal Narrative of that Expedition—Grundsunda -Bergo - Simplicity of the Natives-Increase of Wolves-Sealhunters-Safety-pikes-The Author deserted by his Guides-arrives at Mushaga—Ravages of the Small-pox—Mode of forcing a passage through the Ice-Remarkable effect of Snow falling in Sea-water-Natural Cave of Ice-Sattunga-Description of the Inhabitants-Swedes of Aland - Finlanders - Remains of antient and pure Swedish-its resemblance to English-Seal-skin Sandals-Winter occupations of the Alanders-Preparations for a journey on the ice to Kumlinge-Description of the Procession on leaving Sattunga-Encounter with the Seal-hunters-Change of route-Scene exhibited at mid-day - Arrival at Kumlinge - The Author terminates his personal Narrative.

After various inquiries among the peasants and messen- CHAP. IX. gers who had been sent to ascertain the state of the sea in what is called the Sjon Delen, between the Isle of Vardo and Kumlinge,

The author determines to southern cir-

CHAP. IX. Kumlinge, it was determined to attempt the southern passage by the circuitous route of Sattunga. As in this undertaking, undertake the the most hazardous in which the author was ever engaged, cuitous route. he was of necessity compelled to bear a very principal part, he makes no apology for the frequent allusions to himself which unavoidably occur. He was more than once deserted by his companions, and left to make his way over a frozen sea alone: the incidents he has to relate, therefore, become more than usually restricted in their reference; for which reasons he proposes, in giving an account of this expedition, to alter the style of the narrative, and to make it personal, by transcribing verbatim the description given of it as it occurs in his own manuscript journal.

> Dec. 30.—In the evening of this day, I sallied forth in a small sledge drawn by one horse, with Peter the Swedish interpreter, and a single peasant mounted behind, in the hope of getting the same night as far as Vargatta'. We passed the doubtful surface of the three Sounds which constitute the Bomarsunds Fjerd, upon the ice, by starlight; and arrived safe at Vargatta. There was a dance in the village, at which Peter attended': and upon his return, he brought me word that a farmer from the Isle of Sandö had been present at the dance.

⁽¹⁾ See the Vignette to this Chapter.

⁽²⁾ The last of these Sounds is sometimes called that of Vargatta, by which name it was distinguished in the former chapter.

⁽³⁾ The national Dances of Sweden are; the Waltz, with various modifications; the Polska, or Polish Dance, differing from that of Norway in having slower movements; also Minuets, which are practised in Dalecarlia, and are frequent among the lower orders.

dance, who had crossed the ice to Vargatta, and who gave it CHAP. IX. out that the Sjon Delen was frozen over. Upon this intelligence, several sailors, and captains of merchantmen, whose vessels were all locked in by the ice, and who were waiting in the village for a passage to Finland, came to the resolution of venturing on foot by the northern passage, and asked me to accompany them. Fortunately, I refused their invitation: for although they attempted to reach Kumlinge by this route, they never arrived there: and I could not afterwards learn what became of them. In the morning, as soon as daylight appeared, I set out to explore the southern way; and getting into a sledge, drove to the little village of Grundsunda, where Grundsunda. we were told that the ice might be safely passed to the Isle of Bergo: but as the people here are rarely able to give any accurate information with regard to places a Swedish mile from their own homes, they could say nothing of the state of the ice beyond Bergo.

My journey upon the sea to the Isle of Bergo presented one of the most novel and striking scenes I had ever The ice, instead of being rough and opake, as beheld. before, was smooth and glassy as a mirror; and it is quite marvellous how the horses, although purposely shod for the undertaking, can find a footing upon such a surface. In some places, the transparencies being perfect, and a bright light permeating the abyss, towering rocks of granite were seen rising through the deep, towards the crystal plain over which we glided. To stop, and cast a glance below, would have made the boldest quake, who has been unaccustomed to sights ·like these. When we reached the midway of this fearful expanse,

CHAP.IX. expanse, some degree of alarm was excited by the conduct of our guides; who, upon coming to a chasm which the settling of the surface had left in the ice, halted, positively declaring that they would venture no farther. Instances of superstition, and consequent timidity, among the natives of these islands, had occurred before, but they were too trivial to merit notice; and upon the present occasion it was hoped that a little persuasion would get the better of their panic. sidered the opening of this chasm as an unfavourable omen; and, declaring they should no longer be able to find a safe footing, determined to return; and left us. I remained, with Peter, in the possession of a sledge, with one of their horses; and having with little difficulty succeeded in getting over the chasm, we drove on, and arrived at Bergo without encountering any other obstacle. Over the whole of the wide waste we had passed, there was not an animal, nor any living creature to be seen, excepting wolves, crossing, among distant rocks, from isle to isle, in search of prey: and even these we should have mistaken for large dogs, if the peasants, before they deserted us, had not directed our attention towards them, and told us what they really were.

Simplicity of the Natives.

At Bergo we had an example of the remarkable simplicity and ignorance of the natives of these islands, especially of those which lie out of the common route of passing travellers. Accustomed to see only the inhabitants of the neighbouring shores, our coming, without any of the guides, excited fear as well as wonder. The little village of the island consists of half-a-dozen wooden huts, perched, in a very irregular. manner, amidst a cluster of naked rocks. The few male

inhabitants

Berge.

inhabitants belonging to this settlement were out upon the CHAP. IX. sea, dragging their nets under the ice; which is their usual mode of fishing at this season of the year. In the dwelling that we entered, an old woman and her daughters were spinning; and a boy was feeding a favourite hog, coaxing the animal, and calling it by all manner of endearing names. The sight of two strangers, who, for ought they could tell, might have dropped from the moon, for a few minutes interrupted their tranquillity. Peter, who addressed them in Swedish, was not on this account a whit better received: -" We might be any body, for any thing they could tell. Why did we not go away?" At this moment, our former guides, whether afraid of losing their horse and sledge, or ashamed of what they had done, came dropping in; and then immediately things wore a new face. Such a chattering ensued, that it might be compared to the noise of a rookery. The old woman and her daughters immediately fell to work, and prepared a dinner for these men, of bacon and bloodsausages, which are esteemed a great delicacy. One of the girls now stepped forward, offering to act as a guide in our way to Foglö; to which island, I learned with amazement, it was necessary that we should penetrate, although lying so far to the south, before we should be able to alter our course, and bear up for Såttunga. They would not allow us a single horse to draw one of their sledges: not because the ice was unequal to its weight, but for this reason, which they assigned—that, in returning, the wolves would infallibly take

⁽¹⁾ See the Chart annexed of the Aland Isles.

Increase of Wolves.

CHAP. IX. take it from the girl and devour it. Five of these ferocious animals, they said, had prowled about their dwelling for two nights successively. The great increase of wolves among these islands, and in all Sweden and Finland, of late years, is one of the most remarkable events that have occurred in the history of the country. This change began in the time of Linnæus; who, in his Fauna Suecica, having mentioned the wolf as common in the Swedish woods, adds these words— "Ante 26 annos, rarius animal in Succiá." The wolves have since become such a nuisance, as to call the attention of Government towards their destruction². In the north of Sweden, they make their attacks in such formidable numbers, as to drive the inhabitants, especially the Laplanders, from The Swedish Missionaries settled in their Settlements. Lapland, ignorant of the true cause of their increase, which is unknown, attribute their coming to the war with Russia, which disturbed, they say, these animals in their haunts, and drove them from the extensive forests of Finland.

> The mercury in Fahrenheit's thermometer did not descend lower at noon, this day, than eleven degrees and a half below freezing; but as the distance was great to Foglö, and that distance always doubled by the frequent circuitous deviations

> > we

⁽¹⁾ Fauna Suecica, p. 5. L. Bat. 1746.

⁽²⁾ At the very moment in which this chapter was printing, Mr. Michaelson from Stockholm, visiting Cambridge, informed the author that a general hunt for the destruction of wolves is to take place next year, by order of the Swedish Government. In the provinces of Jemteland, Herjeadalen, and Güstrikeland, the number of wolves has amazingly increased: in one of these provinces they have devoured eight children within the last winter: and they have advanced from the northern provinces, southward, so as to make their incursions within the very neighbourhood of Stockholm.



SPAL SHOOTER ON THE EROZEN SEA.

снар. іх.

be placed upon the very best guides among the Alanders, when the ice is in a doubtful state; for these very men were the first to desert me afterwards, when their services were most wanted. The fact is, that the same persons who would venture through the most turbulent seas in the dangerous storms to which the mouth of the Gulf of Bothniå is liable, and in boats which are any thing but sea-worthy, are often cowards upon the ice; and perhaps for this reason, that the skill and dexterity which enables them to encounter winds and waves are of no avail here.

We now directed our icy pilgrimage towards Mushaga, by an eastern instead of a southern course; our seal-hunters taking the lead with their iron-shod pikes, and often leading

us a weary circuit, to avoid the openings and hazardous places of thin ice, by which we were compelled to deviate from the direct line of our march. The pikes used to ascertain the safety of a passenger are about six feet in length, having at the lower extremity an iron spike with a sharp and strong hook. The spike is used to try the thickness of the ice. If, after two or three stabs with this iron spike, the water do not spout up, the ice will bear a horse; and if it do not rise after a single blow, but appears only after a second stroke, it is considered as fit to support a man. The hook attached to this spike is for the purpose of dragging out

the bodies of those who are unfortunate enough to slip through the crevices, or fall into the holes, which are deceitfully covered with a thin icy superficies. These accidents are generally owing to the snow, which, by covering such places, prevents a person from being aware of the sudden danger he

Safety-pikes.

may encounter from a neglect of sounding often with his CHAP. IX. pike. Every individual of our party was provided with one of these safety-pikes; although the chief use of them is for those who precede and act as pioneers, who plunge their pikes into the ice incessantly, at every step, in order to make the way sure. If the foremost man give an alarm, the rest of the party fall back, and disperse as quickly as possible; taking care not to collect together upon one spot. We had many of these alarms; and our weary walk continued throughout the whole day a journey of painful suspense and apprehension, never free from danger; being often farthest from the land when we appeared to be the nearest to it, in consequence of the circuitous deviations we were compelled to make, in order to obtain a footing. About half after two o'clock P.M. we were within sight of Mushaga; but the difficulty of reaching the shore increased as we approached. Presently we could discern the figures of several of the natives, standing upon a high coast among the rocks, regarding our movements with an earnest attention. We soon found the reason of the interest we had excited: the ice, as we advanced, appeared almost everywhere open; and became so thin, that our pikes, brought up water at every stroke. It certainly was not a moment for much ceremony, and the guides used none; for the seal-hunters falling back with The Author precipitation, the Vargatta peasants dispersed also, followed his Guides. by the interpreter, who, in spite of all my remonstrances, left me in this terrible juncture, to shift for myself. In such a situation, the presence of any one, it is true, could only serve to increase the danger; and for a moment I was almost

CHAP. IX. almost bewildered. To turn back again, and retrace our former footsteps, at this late hour of the day, over fields of ice extending nearly thirty English miles, would require more strength than I could then muster, exhausted as I was already by fatigue. I saw no alternative but that of persevering, at all hazards, another quarter of a mile; and slowly ventured on towards Mushaga, sometimes working my way nearly a mile in order to gain an approach of twenty yards. At every stroke of my pike, the water gushed through the orifice it made; until the ice beginning to bend with my weight, I was afraid to use it. By perseverance, however, I had gained a very near approach to the land, which gave me spirits and courage: the ice became stronger—then weaker: at last I reached the rocks—covered also with ice; and, in my eagerness to climb their slippery surfaces, sustained many severe falls, one of which brought me headlong back again The people collected on the shore now upon the sea. descended to my assistance; and the guides who had deserted me, ashamed of being left behind by a stranger, after various attempts, following my footsteps, arrived also at Mushaga. Here we found the sea quite open; the ice only extending an English mile from the shore: some-other expedient, therefore, to reach the open water with a boat was now become necessary.

Arrival at Mushaga.

> We entered a miserable cottage. The scene of human woe which was here presented, perhaps dever had its equal. We found within, a wretched family; amongst whom were seven children afflicted with the putrid small-pox, in one close hovel;—the eldest, a daughter, dead of the disorder;

Ravages of the Small-pox.

and the forlorn parents weeping for the inevitable fate of CHAP. IX. those, their little ones, who still survived. The diet of these poor creatures consisted of raw salted fish, first steeped in sea-water, and then frozen. To heighten the calamity of this heart-rending spectacle, not a ray of comfort or of hope could be administered; nothing could be done for them,-nor did they ask for any thing. It was a sight to move the most obdurate; and the impression made in viewing it will never be forgotten.* .

Amongst a few other dwellings, at some distance from this scene of sorrow, we hired four peasants, who engaged to work out a boat that was lying fast locked in the ice among the rocks. A most curious undertaking ensued; Mode of forcing a passage that of forcing a passage for this boat through the mile of through the ice. • ice, into the open sea. It seemed to require nothing less than the labours of Hercules to affect this; but the promise

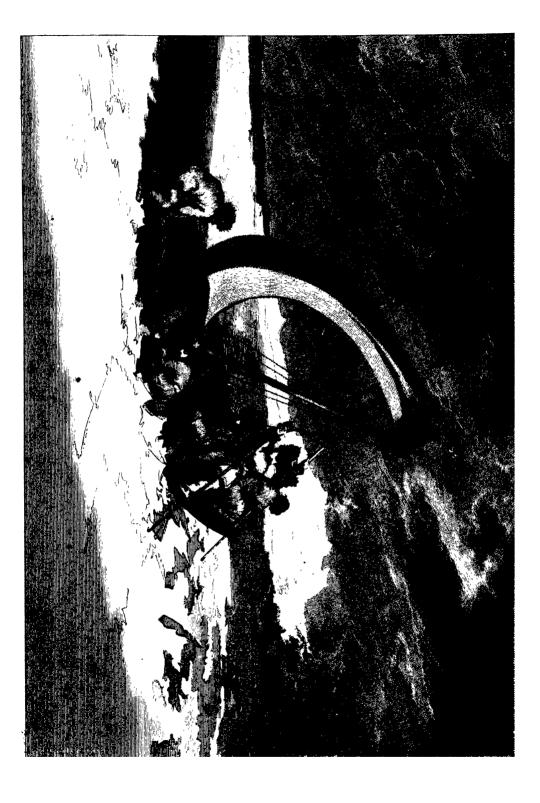
of high reward, and the sight of two bottles of vile Swedish brandy, which the Interpreter took care to display to great advantage, wrought marvellously in our favour. The sail belonging to this boat, when produced, was found to be frozen into a solid sheet of ice; but, after much labour, this was hoisted: and a plank being fastened with nails along the ribs of the boat, to prevent her staving, she was laid upon her side; and we all got into her, except two of the men, who remained upon the ice, holding by her bows. In this manner she scudded before the wind upon the surface of the thin and rotten.ice; which soon giving way to the superincumbent weight, we sunk, boat and all, into the water; the two peasants, without, remaining suspended, one

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one at the prow, the other at the stern. Now began a part of the operation in which these men, accustomed to such trials, shew very considerable dexterity. By giving their vessel a swinging motion, alternately raising and depressing the prow as it was forced by the sail upon the ice, they continually succeeded in breaking a way through it; and penetrated along the channel, thus formed, towards the open sea, by a tedious but sure progress of about 400 yards in an hour. Fortunately, a fair wind blew with great violence; which aided the undertaking more than any thing else; the men being nearly exhausted before the passage was thoroughly effected. In more severe weather, they find this method of working through the ice impracticable, because it freezes together instantly as fast as it is broken, and they remain locked in; by which means the party of . peasants who had conducted some travellers to Kumlinge, three years before, as was related, were set fast in the ice at a great distance from the shore, and nearly starved to death. The ice, before we got clear of it, was nearly six inches thick; and it was to our little stock of brandy that we attributed our success. The poor men engaged in working the boat were so overcome by their excessive labour, that without frequent draughts of their favourite liquor they would have given up the undertaking as hopeless'.

Αt

⁽¹⁾ The novelty of a boat thus sailing upon a field of ice, from the singularity of its appearance, may serve to amuse those who sit by their fire-side, "hors de combat," and seek only for amusement in these pages. The annexed Engraving, shewing the author's situation at this moment, is from a design by the celebrated Atkinson, taken by him, after the author's arrival at Petersburg, from a sketch made by the author upon the spot.



At last, we reached the open sea: and here a violent CHAP.IX. tempest of wind and snow came upon us: and the sudden Remarkable effect of the snow mingling with the sea-water, now cooled falling in Seanearly to the point of its congelation, was most striking. The water became turbid, like milk turning to curd: pieces of ice soon made their appearance, and were heard rattling against the prow and sides of the vessel. The old exclamation of "Gud bevara!" once more gave its warning, that things were not quite as could be wished by our Swedish steersman: we saw evidently, that if we did not quickly reach Såttunga, we should be in the situation, already related, of the poor mariners in their return from Kumlinge. The change was so rapid, as the snow continued falling, that when we were drawing near to the Sattunga shore, we found ourselves sailing through immense moving slabs of ice; which were driven with such force against each other, that the noise of their striking together, all around us, was like the sound of a hundred drums beating: our boat was driven against them with a degree of violence that made us apprehensive of her splitting. At about two miles distance, we descried a boat, already beginning to be set fast, and working its way as we had done before, in a part of the sea where these floating masses had already fixed themselves into a compact The water itself seemed full of snow: but this appearance always takes place whenever its particles are beginning to congeal. That the whole passage would speedily become frozen, was very evident; and this change actually took place in the course of the night. " An open channel admitted us within 250 yards of the Island of Såttunga:

CHAP.IX. Såttunga: and here the ice was strong enough to bear the weight of our boatmen, while they drew their vessel out of the water, and laid her up in a snug birth for the This birth, at any other time, would have been night. considered by me as an object of great curiosity: it was

Natural cave

Såttunga.

a beautiful cave of ice, hung with pendent icicles and spangling crystal gems,—the palace of the seals, and temple of their amours: but, under the pressure of fatigue and cold and hunger, all its beauties could not detain me, even for an instant. The boatmen had already quitted it: and having cast my eye over the arched roof and sides of this natural wonder, I followed them, through a forest, to the Village of Sattunga; which consists of a small church, and some better-conditioned cottages than it is usual to see in these islands. As soon as we arrived we found here both the Eastern and Western Post, waiting for a passage; also about fifty sailors, together with other persons whose ships had been frozen in, waiting to get to Finland upon the ice. A party of Russian Gentlemen set out, as soon as we arrived, in the hope of profiting by the passage we had forced through the ice on the Mushaga shore, to get to that island: what success they met with I did not learn: night was already set in, and it would require time to get our boat out again. One of them gave up his apartment to me, upon leaving Sattunga; saying, he had found it cleanly and comfortable. The poor hostess, who conducted me into this chamber, was as proud of receiving strangers beneath her roof as if kings were come to visit her. Turning up her beds, she exclaimed, "Look here! you shall sleep as well

in my house as if you were in Stockholm: we have no such CHAPAX. things as lice or bugs here." My last loaf of bread was frozen, and as hard as stone; but this good woman boiled it in milk; and I never tasted a more delicious meal than from the bowl containing the porridge which she thus prepared and placed before me. Intending to set out early in the morning, I wished to pay for my night's accommodation and excellent fare, and for this purpose offered moncy to the mistress of the house; who, with great simplicity, but earnestness of manner, said, "Alas, Sir! give me something better than money. I have had a pain in my head upwards of forty years, and sometimes it brings on fits: leave me but a charm to cure this disorder, and I shall bless you till I die!" Whether she believed that loafsugar would act as a charm or not, was uncertain; but so completely unknown to her did this substance appear, that, having begged a lump of it, she stuck it up among her rarities, in a cupboard; not to be used, but exhibited as a curiosity.

The Island of Sattunga occupies a central point amidst the innumerable rocks and inlets which almost fill the mouth of the Gulph of Bothnia. It lies to the south of the Delen, or Delet, between Vardo and Kumlinge, and exactly midway between the coast of Sweden and Abo, in Finland. The natives are fishermen and seal-hunters: they are the best-Description of looking, and most robust, of all the islanders. During the tants.

summer

⁽¹⁾ See the Chart. See also Hermelin's "Charta öfver Abo och Björnebergs Hötdingedöme." Stockholm, 1799.

CHAP. IX. summer they carry on a trade with Stockholm in fish. My host and his son arrived late in the evening; -men really of "My boys and I," said the father, gigantic stature. pointing to the athletic figures of these fine young men, "will accompany you to-morrow to Kumlinge: and you will not be deserted by us, upon the ice, as you were by a parcel of striplings from Vargatta and Bergo. We have heard of all your adventures in going to Mushaga: there will be an end of such risks now: trust only to our guidance, and we will take care of you." These men were Swedes; as are, properly speaking, the inhabitants of all the Aland Isles, and of the islands upon the coast of Finland. Formerly, these islands were inhabited by Finland corsairs; to put an end to whose piratical depredations, the Swedes possessed themselves not only of the Isles, but also of the Kinland coast as far eastward as Petersburg, and northward as far as Gamba Carleby. The country at this moment, from Gamba Carleby to Björneborg, was entirely inhabited by Swedes; speaking, of course, the Swedish language. From Björneborg, as far as Abo, the people are a mixed race of Swedes and Finlanders. We found the Swedish language in use as far as Varssala: but when we reached Varssala, it was no longer understood. The real Finlanders, that is to say, the genuine remnant of the original colony, which yet preserves its antient customs and language in their pure and unmixed state, dwell in the interior eastern district of Finland: they inhabit the province of Tavastehus and Savolax, a wild and watery region, covered with numberless lakes and most extensive forests, and peopled by a race of men who are considered by all their

Finlanders.

their neighbours as the hardiest of all the Northern tribes. CHAP. IX. In the severest winters, these men perform astonishing journeys; going about with their bosoms bare, exposed to all the inclemency of the weather. More barbarous even than the Laplanders, they hold in sovereign contempt all the comforts and luxuries of more refined nations. "ILLIS," said Tacitus, speaking of the Fenni, "NE VOTO QUIDEM OPUS ESSET." Unaltered in all the ages that have elapsed since he gave that eloquent description which no paraphrase can express, we may still say of them, "FENNIS MIRA FERITAS, FOEDA PAU-PERTAS: NON ARMA, NON EQUI, NON PENATES: VICTUI HERBA, VESTITUI PELLES, CUBILE HUMUS." For all that concerns their early history, and the origin of the Finns, we may in vain ransack the libraries of the world. The Scrictofuni, mentioned by Paulus Diaconus, are not, properly speaking, Finns, but their cousin-germans the Laplanders, to whom perhaps the account given of the Fenni, by Tacitus, may, from some of his observations, be rather applicable. true

(1) De Mor. Germ. tom. II. p. 592. Ed. Ernesti. Lips. 1801.

^{(2) &}quot;Huic loco Scrictofenni (sic enim gens illa nominatur) vicini sunt. Qui etiam æstatis tempore nivibus non carent: nec aliter fieri potest, quam ut crudis agrestium animantium carnibus vescantur: de quorum etiam hirsutis pellibus sibi indumenta coaptant. Ii à saliendo juxta linguam barbaram etymologiam ducunt. Saltibus enim utentes, arte quadam ligno incurvo ad arcus similitudinem feras assequuntur. Apud hos est animal cervo satis assimile," &c .- Paul. Diacon. de Gestis Langobardorum, lib. i. c. 71. p. 354. Basil. Froben. 1532.

^{(3) &}quot;Sola in sagittis spes, quas, inopia ferri, ossibus asperant. Idemque venatus viros pariter ac feminas alit. Passim enim comitantur, partenique prædæ petunt. Nec aliud infantibus ferarum imbrium que suffugium, quam ut in aliquo ramosum nexu contegantur: huc redeunt juvenes, hoc senum receptaculum. Sed beatius arbitrantur, quam ingemere

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filled with smoke, and, from various other causes, are black and filthy beyond description. Fortunately, the very nature of this climate is hostile to the great increase of vermin; but such reptiles and revolting insects as are able to withstand its rigours, find themselves as much domesticated among the Finlanders, as are their pigs, poultry, cattle, dogs, and cats; all of which, together with men, women and children, find a lodging beneath the same roof. With regard to mosquitoes, they may almost be said to breathe these insects; so completely, during summer, is the atmosphere possessed by their swarms.

Remains of antient and pure Swedish.

Its resemblance to English.

Among these islands, the Swedish language is said to exist in its most antient and pure state: and it here approaches so near to the English, that a servant of our own country, who travelled with us, was able to understand and sometimes to converse with the natives. It is like the old Scottish-English; the word muchin occurring for mainle, to signify much; then for think, meaning the which; brance for burnt; slagin for slain; gladders for gladdened; &c. &c. Persons at all accustomed to read old English books in the Gothic letter will have little difficulty in reading old and pure Swedish: they will readily translate the following lines of an old Swedish

agris, inlaborare domibus, suas alienasque fortunas spe metuque versare."— Tacit. ubi supra.

If the Roman historian had lived among the *Laplanders*, he could not more accurately have described their tents made of boughs, their habits, and disposition.

^{(1) &}quot;The king, that heard all his carping, be thanked her in meikle thing."

Swedish ballad, as they are preserved by Professor Porthan of CHAP. IX. Abo, among the annotations to the "Chronicon Episcoporum Finlandensium," printed at Abo.

> Swerige bade muchin wade Of Carelom, och stoer onade; The foro ofwer bafwet och in i Malar, At the brande opp Siftuna: Joan Arkiebiskop wart ther Blagin, Thef gladdes Carcia och Rusaland.

THE SAME ENGLISHED.

Sweden had much danger Of Carclians, and great disgrace; They passed over the sea and into the Mælar, And they burnt up Sigtuna: John Archbishop was there slain, The which gladdened Carelia and Rystand.

The verb To eat, in the Aland Isles, is exactly the same as with us in English, and has the same pronunciation; but in Stockholm, and in other parts of the country where a mixture of the German has intervened and occasioned modern corruptions in the language, speigen is substituted for ata. Again, a bush is called buska; and a decoy-duck, a lure, as in England. The instances of similarity in the two languages which occur among the names of domestic utensils, as Not, Nan, Hammer, and in the appellations bestowed upon the implements of husbandry, are too numerous to mention.

The manners and customs of the Alanders bring to mind those of the natives of the isles of Scotland. Every man manufactures for himself. They pique themselves much upon their sandals of seal-skin, in which may be seen the seal-skin

CHAP. IX. first rudiments of a shoe. This kind of sandal is an oblong piece of skin, with a cord fixed round its edge, by which the sandal is made to close upon and cover the foot; the ends of the cord being afterwards fastened round the Similar sandals, though made of different materials, are worn by the natives of the southern provinces in Italy, especially those of Abruzzo; also by the Laplanders and Russians'. I have seen them finely represented in marble, among the works of Greek sculptors. The thongs, or cords, which bound them to the feet, were by the Greeks called "marres?". Among the Alanders, the hair of the seal is preserved on the outside, and within they put a little straw. These sandals, rude as they appear, are, when made of sealskin, in such high estimation, that although common upon the feet of every one of the inhabitants, not one among them can be prevailed upon to sell a pair to a stranger. great utility of them arises in their resistance to moisture: they prevent the melting snow from penetrating, and are at the same time exceedingly light and comfortable to the feet.

Winter occupations of the Alanders.

During the winter, the Alanders are chiefly occupied in fishing, by dragging their nets under the ice, or in hunting for and killing seals by shooting them. Few people are such expert marksmen'. When the sea is frozen over, they creep about

⁽¹⁾ See Vignette to Chap. X. p. 173, of the First Part of these Travels, Vol. I. Cambridge, 1810.

⁽²⁾ Mark i. 7. Luke iii. 16. Perizon. ad Ælian. ix. 11.

⁽³⁾ The Norwegians are not less skilful than the Swedes in the use of the rifle. There is a passage upon this subject in Dr. Lee's MS. Journal:-

[&]quot;The Norway farmers are celebrated shots. I am credibly informed that they hit their

about among the rocks, with their rifle-barrelled guns, CHAPLIX. watching for the appearance of a seal's head through an aperture in the ice. These animals are forced to come up for air; and the moment a seal-shooter sees one of them thrusting his nose through one of the holes to breathe, he levels his gun and dispatches him. They seldom miss their aim; for the loss of ammunition is a very serious concern. The manner in which the seals expose their young to all the rigour of the climate, is very extraordinary. They leave them upon the naked surface of the ice, in frozen caverns among the rocks, and sometimes in cavities of the ice itself. During the day-time, they dive through the holes and chasms into the abyss below for food; and at night, steal unperceived to the place where they have deposited their young, carrying with them the fish they have taken, and there feed them. If the seal-hunters find them at large upon the ice, or upon the shore, they dispatch them easily with the safety-pike before described. The appearance of the seal-hunters equipped for this singular species of chace is really curious. They generally go in pairs, in search of their game. I met several of these intrepid sportsmen, braving the severity of the atmosphere, and watching for hours upon the same spot for the appearance of the seals. Their dress consisted of a sheep'sskin for a jacket, worn with the wool towards the body,

and

their game with a single bullet; and that were they to miss, they would be quite out of temper, as the loss of a charge is of much value to them. They often shoot game on the wing with a bullet; and a Norwegian has been known to assert that he would shoot his bird, in this manner, through the head; and has fulfilled his engagement."

CHAP. IX. and fastened by a leathern belt about the waist; seal-skin sandals; and a fur cap. At their back they carry a rifle, sometimes inclosed in a case of seal-skin; and in their righthand appears the safety-pike, which they use as a walkingstaff1:

> As I was going to bed, a crowd of other travellers arrived, all adventurers, like myself; who, from some of the neighbouring isles, had effected a passage to Suttunga, and wished to get to Kumlinge. These were all mariners; the masters and crews of merchant-ships locked in by the ice. Having left a few hands on board, merely to guard their vessels, they were all going to their respective homes in Finland. little village of Sattunga had never seen so many strangers assembled there before: every cottage was full of them. As soon as daylight appeared on the following morning, the court-yard of the house where I had slept was crowded with persons who were to join company, and had made this their place of rendezvous. As every one of these persons had engaged his own party of peasants, almost every male inhabitant of Såttunga was hired for the journey across the ice to Kumlinge. I had engaged my host, two of his athletic sons, and five other peasants. I found the whole body drawn up, as in military array. The dress of the Sattunga peasants was moreover uniform: they were all clad in the same simple and cleanly manner, wearing white sheep-skin jackets, dark fur caps, seal-skin sandals; and each person had his safetypike in his hand. They amounted in all to thirty-seven

Preparations for a journey on the ice to Kumlinge.

persons;

persons; and the proudest General in Europe might have CHAP. IX. rejoiced to number such men among his troops. We had some little distance to march by land, until we came to the sea-shore opposite Kumlinge; when all of them were formed into a procession upon the ice, exhibiting a scene Description of altogether new to me. First went a party of scouts, as on leaving pioneers, proving the ice with their safety-pikes. Then came the Swedish Post to Finland; the mail-bags, fastened upon a very small sledge, being drawn by a single man. Then followed another party of scouts, with their pikes as before; and, after these men, my own sledge, bearing whatever clothes I had with me, and a small stock of provisions which I had purchased for my friend in Kumlinge, whom I expected to find in want of common necessaries. Next advanced a promiscuous multitude of travellers, without much order or caution, preceding their respective sledges, and attentive only to the preserving of a proper distance from each other, so as not to huddle together on any one spot: and, behind all these, another party of the peasants, ready for any work in which their assistance might be required. The whole retinue, when extended upon the ice, reached to the distance of two English miles; and in those intervals when I could sufficiently abstract my mind from all sense of danger to survey this curious train, the effect produced by the appearance of such a numerous host marching over the abyss of water, was very pleasing. I had walked in this manner thirty-five miles on the preceding day, in a state of such constant alarm, that little leisure was allowed for calmly viewing the scene around us; and the guides were of opinion, that. VOL. VI. 3 A

CHAP. IX. that, although the distance to Kumlinge in a direct line was not above twenty-one English miles, yet the number of circuits we should be compelled to make would make our journey quite equal to that of the preceding day.

Encounter with the Sealhunters.

We had not long quitted the shore of Såttunga, and were advancing towards an island in front of our route, when two seal-hunters suddenly made their appearance from behind some rocks, raising their voices as loud as they could, and were seen with their lifted pikes, calling to the foremost of our scouts, and bidding them to halt and fall back as quick as possible. The cries of "Keep off! keep off!" in the Swedish language, were at first not heeded by our guides: but as we drew nearer, we could distinctly hear these men telling our pioneers that the ice was open in several places, and everywhere, according to their own expression, "too rotten to be trusted." Accordingly we fell back with as much caution as possible, retracing our former footsteps; and afterwards altered our course, proceeding about nine English miles to the south of Sattunga before we could bear up again towards the Island of Kumlinge. A variety of currents, prevalent among these islands, keep the sea in some places open, even during the hardest frosts; but as there is always inconstancy in their operation, it is impossible to say when or where a route may be practicable upon the ice, without proving it. That so many open places were not owing to any want of rigour in the temperature, is evident

Change of Route.

from

⁽¹⁾ See the Plate annexed, as engraved by Pollard, from a sketch made by the author upon the spot.



from this circumstance,—that when we were farther from CHAP. IX. land, we found the surface, which had been hitherto smooth and sometimes glassy, fixed in a variety of irregular and fantastic shapes, rough and indented, but hard as adamant, and evidently shewing to us those broken masses which appear only when the waves of the sea have been suddenly fixed and rendered solid during their turbulent state. One can hardly conceive any thing more extraordinary, than a frost capable of causing such an effect; nor would it have been produced without a heavy fall of snow, at the time, mingling with the salt-water. These slabs of ice form instantaneously: and, by the commotion of the waves, being thrust edgeways out of the water, become fixed, in all directions, into one solid bed. Our walking was, in consequence, rendered painful and tedious,—a work of difficulty, and often of alarm; apertures and chasms among these huge masses shewing us the liquid abyss beneath our feet; and frequently, when we thought ourselves the most secure, we were found to be in the greatest peril. Not a step could be taken without first proving, every one with his pike, where he should set his foot: nor was it at all safe to tread in the footsteps of those who had gone before; since the same ice which had sustained the weight of one of our party, might, as indeed it happened more than once, give way with the next; and we had a narrow escape of losing two of our guides, who were saved by the dexterity, watchfulness, and courage of their comrades. An instance of a similar nature happened soon afterwards. The men, who had the charge of the Ostero-Bothnia Mail, upon a hand-sledge, actually passed

CHAP. IX. passed over an opening in the ice covered only by a thin surface of frozen snow. Presently our pikemen approached the same spot; and were about to attempt the same dangerous passage, when, at the first plunge they made with their pikes, the water spouted up, and they scampered off in all directions. I had no idea of the extent of their danger, until, coming towards the same place, I perceived only a thin covering of snow, which nevertheless had been sufficiently frozen to support the weight of the peasant and sledge with the Ostero-Bothnia mail-bags, and of the guides who had gone before.

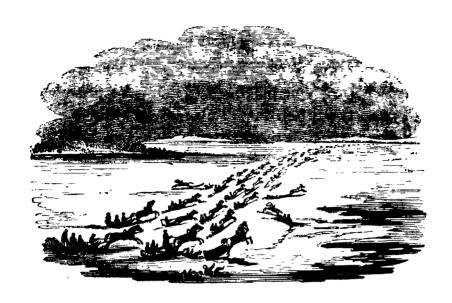
> As we continued to advance across the more open sea, the ice became stronger: and being now at a considerable distance from any land, the prospect widened on all sides, and became at every instant more desolate and appalling. The wind had carried off every particle of snow; and we journeyed for many miles over a surface clear and transparent as glass. It was the last day of the eighteenth century; which made me push forward with spirit and vigour, that, at least, I might terminate the most extraordinary adventure of my life, together with the most remarkable period of it, in some place where I could lay my head, and not remain benighted upon the frozen surface of an inhospitable sea. At mid-day, I halted to distribute some slight refreshment among our guides. As I served out to them their allowance of biscuit and Swedish brandy, they all stood bare-headed, and said grace. What a scene, for such solemnity! While they were engaged in their brief and scanty meal, I surveyed the distant waste. Towards the East, all was bleak and open; a vast region

region of "thick-ribbed ice," wherein hardly a single object CHAP. IX. relieved the wandering eye. The sun, scarce elevated above the horizon, put forth ungenial splendour; for although shining in cloudless majesty, his rays came across the chilling desert, rather reminding one of what he wanted than of what he gave. The thermometer, when exposed to his full beams, scarcely acknowledged his presence. The mercury, according to Fahrenheit's scale, in the morning, had fallen to ten degrees above zero; and now, at noon-day, it only rose one degree higher. Towards the West, the prospect was more varied; the numberless rocks, islands, and islets, which fill the Aland Sca, being here collected into innumerable clusters.

We set out once more: and presently the Island of Kumlinge was hailed by our party, as being visible at the distance of fourteen English miles towards the North. It was immediately pointed out to me by one of our guides; and the sight of it, at that moment, filled me with joy. We pressed forward with all the speed we could muster, and met with little to impede or oppose our progress. About three o'clock we entered into a small bay belonging to the island: and being very eager to land, I made the best of my way towards a low shore, with one of the most active and foremost of the guides: the rest of our retinue were a long way in the rear, some of them at the distance of five or six miles; being retarded by their burdens and sledges. Here the marks of footsteps and sledges from the village of Kumlinge to the sea-side were very visible in the snow: and as these served me for excellent land-marks in tracing the road thither, I set

chap. ix. out alone; and had not proceeded above two English miles, before I distinguished, among a groupe of little wooden-boxes, which were so many dwellings belonging to the village, an upright pole, to which a vane was attached,—the well-known sign of the Gastgifware-garb, or Inn, in Sweden. I hastened towards it; and entering, found my long-lost Friend and Companion,—as much rejoiced to see me as I was to see him,—sitting in a black and miserable dungeon, which he had used as his apartment; but in good health, after a week's confinement in a place where the combined action of fire and smoke could not prevent every thing around him from freezing.

Thus terminated the year ONE THOUSAND EIGHT HUNDRED of our æra. And here I shall also terminate the account of this Expedition;—thankful to Providence for the dangers I have escaped; and reserving for another Chapter, in the opening of a new century, the style of narrative which, being less personal, I had before adopted.



CHAP. X.

KUMLINGE TO ĂBO.

The Party leave Kumlinge - Brief account of that island - Bjorkö-Brando-Extraordinary Congregation for Divine Service-Vattuskiftel-Bursting of the Ice-Varssala-Revolting manners of the Natives - Valedictory remarks upon the Swedes - Fahrenheit's Thermometer fifty-two degrees and a half below freezing-Turvesi Passage—Accidents from the frost—Helsing—Himois—Vinkela— Action of atmospheric air upon vapour - State of travelling in FINLAND—Laitis—Tursanpare—Niemenkyla—Nussis-Nummis -Arrival at Abo-Narrow escape from suffocation.

THE next day, Wednesday, Jan. 1, 1800, we left Kumlinge, CHAP. X. crossing part of the Lappvesi Passage with horses to our The Party sledges; but we afterwards found that the ice would not bear Kumlinge. their weight the whole way: our guides therefore left these

CHAP. X.

poor animals exposed upon a bleak island, from which they said they would not attempt to stray; and themselves drew our sledge to Bjorkö, or the Birch Island. A painter would have found a curious subject for his pencil, in the figures of the two horses upon an ice-clad rock, when we abandoned them. Being heated by drawing the sledges, the drops of sweat had congealed into long icicles, sticking out, like bristles, all over their bodies, and hanging in such long and thick stalactites from the nostrils, that it seemed dangerous to attempt to break them off, for fear of tearing away the flesh with them: all their shaggy manes and tails and hair were thus covered by a white opake crust with pendent icicles, so that they seemed rather like some non-descript animals than horses. As soon as we quitted them, they turned their heads to leeward; and remained fixed, like marble statues, upon the rock; closing their eyes, and scarce shewing signs of animal life.

Of Kumlinge, sometimes written Kumlinga, the island we had now quitted, a very short description will suffice. It is larger than any of the neighbouring isles, and has a population of about 320 souls. The number of families amount to forty. The church, a rude Gothic structure of considerable antiquity, is built of granite, and roofed with wood. The inhabitants are an industrious race, and cultivate the small quantity of soil their island affords, so as to make it very productive.'

⁽¹⁾ The following extracts from Mr. Cripps's MS. Journal, written during his solitary confinement in Kumlinge, will not be read without interest. He describes his lodging as a chamber about four yards square, with two beds in it; one of which was occupied

Bjorkö has nothing more worth notice than its name. The inhabitants of the small village so called were gone to church, as they do every holiday in Sweden; the peasants being particularly attentive to their religious duties. Here we observed the

CHAP. X.

occupied by his *English* servant; and there was just room enough besides for our little dog to stretch himself before the fire, upon a floor covered with dirt an inch thick. The sides of this wretched chamber were covered with inscriptions, the lamentations of former travellers detained here by adverse weather. These extracts will be transcribed *verbatim*, in the order observed in the Diary whence they are taken.

"Kumlinge, Wednesday, Dec. 25 .- The inhabitants of this village went to church this morning at six o'clock, by candle-light. After breakfast, I hired a horse and sledge, and set out, accompanied by my host, to examine the state of the island.—The village of Kumlinge is distant half a Swedish mile from the sea.—Bought three white hare-skins. for which they asked about twelve pence of our money. Fox-skins sell for a much higher price. The people of this island do not grow rye enough for their own consumption; but import it from Finland, paying for it in money which they obtain from the same country by the sale of their fish.—They prefer the winter to the summer season. In winter, they make and repair their nets, and kill quantities of game, especially of Black Game, which is common here. In summer, they work hard, getting in their stock of hay, harvest, and fish. Like all other Swedes, they cannot live without, brandy; but they seldom drink to intoxication. Even the gentry of Sweden are discontented, and quite out of their element, without brandy; especially if they have it not with their whet before dinner. All the peasants wear fur-caps; and each man two pairs of gloves, one of worsted next the skin, and one of leather over the worsted. While engaged in making these notes, the daughter of my host entered and presented me with a plate of nuts, which she said they gather in the summer to eat at Christmas.

"Thursday, Dec. 26.—My host and all his family are again gone to church. The Alanders, in this respect, resemble the rest of their Swedish countrymen, being sincerely a religious people. My English servant has observed, that every night before they eat their supper they all kneel down and say their prayers most devoutly, and after supper sing a hymn of thanksgiving. The mannner in which they sleep is singular. They all live in one room; their beds being stationed in cots, one above another. To these they ascend, naked, by ladders; stripping themselves, even before strangers, without appearing conscious of any indecency.

"At nine this morning, Celsius's thermometer, in my room, was two degrees below 0. Having placed it in the open air, it fell fourteen degrees below 0. I then exposed some Swedish brandy in the open air: it did not freeze; but the bottle being brought into the room, was instantly covered with ice. The greatest heat that I could produce in my

СИАР. Х.

the near resemblance between the names of things in these island and in our own country. The fire was low, and they said they would throw on a bush (busta) to raise it, and brought in some juniper boughs for that purpose.

From

miserable chamber did not raise the mercury above the freezing-point. The sun rose this morning at about ten minutes after nine, and set about ten minutes before three. Finding that the brandy did not freeze in the bottle, I put out some in a pewter-plate, and it became solid.

"Friday, Dec. 27.—In this village there are nearly as many windmills as houses; each family having its own mill, which they call Quarn.—Every article of the wearing apparel of the inhabitants is of their own manufacture.—The main business of the year, with all of them, is that of taking fish. They sell only what they do not want for their own consumption; and buy malt and rye, from which they make their brandy. They moreover sell tallow, and make their own candles: they also send butter, cheese, and pork, to Stockholm; and brew a bad kind of beer.—In their persons they are much neater than in their houses.—Each family kills five or six seals in a year, and fourteen or fifteen sheep.—My host pays about fourteen or fifteen dollars annually to the King, and as many Plåts* to the Clergyman; and two Plåts annually towards the repairs of the church—IIe maintains one horse, eight cows, and fifteen sheep.

"Saturday, Dec. 28.-This morning, my worthy host invited me to accompany him upon a shooting-excursion. He was dressed in the habit worn by all the peasants;—a sheepskin jacket with the wool inwards, a fur-cap, woollen breeches, and worsted stockings; shoes of scal-skin; and over them rein-deer skins with the hair outwards, to prevent the snow from thawing and penetrating to the feet. One of the most entertaining sights is, to see one of these marksmen upon a shooting excursion in the forests, whither I followed my landlord. Upon coming into the wood, he placed himself upon a small eminence among the trees; and here, laying down his gun, he, to my great amazement, drew out of his pocket a small opera-glass, and began to survey all the surrounding district. After a few minutes' attentive observation, "Ah!" said he, "there is an Orra"the name they give to the Black Game. Then crawling upon his hands and knees to a convenient distance, he placed himself, at his whole length, upon the snow. After a considerable time spent in taking aim, he coolly opened the pan of the lock of his fowling-piece, took out a piece of tow, and, levelling the barrel once more, drew the They are particularly careful in cleansing the gun after every trigger and shot the bird. shot; and are hardly ever known to miss their aim, if they draw the trigger: but this they never do, unless they be sure of their mark; and they never attempt to shoot flying-

This

From Bjorkö, we proceeded, chiery by land, to Brandö, or the Burnt Island. Where we had to pass the inlets and passages of the sea, the ice was strong enough to bear our horses the whole way, which enabled us to perform this part of our journey very expeditiously. At Brandö there is a wretched village of the same name; and this name had excited our curiosity, because it signifies "The burnt island:" but we found

Brandö.

This was a cock-bird, and a very fine one, of the size of a pheasant. Afterwards, he shot a kind of wild-duck, which he called a *Lure*.—The people here retire to rest as early as seven o'clock in the evening.

[&]quot;Sunday, Dec. 29.—Attended divine service in the church. The prayers and sermon were in the Swedish language. The men sit on one side, and the women on the other, as in all parts of Sweden. The Clergyman seemed to preach with great energy, and in a very loud tone of voice. He invited me afterwards to his house.—The disposition to shew kindness to strangers prevails all over these islands; but they speak of the Russians with strong marks of aversion.

[&]quot;Monday, Dec. 30.—A great deal of snow fell to-day, towards evening.——I have before said, that the natives were all their own tailors, weavers, shoemakers, &c.; but I now observe that they are also their own tanners and carpenters. They procure alder-bark, and chop it into very small pieces; boiling it in water, in which they first put their skins; and thus manufacture their own leather.——A white hare was dressed for my dinner this day. It was first boiled, and afterwards fried; which I found to be no bad way of dressing a hare.——Two young women came to the house, according to a very extraordinary custom, to beg, before their marriage. When any of the young girss of the island are about to marry, they are allowed to ask for gifts from all their friends, for some months before the knot is tied. These damsels were to be married in the ensuing spring. They brought with them each a bag of linen, as white as snow. Into these bags their neighbours threw their eleemosynary gifts;—a little money—a little corn—some feathers—a little household provision—a little wool—a little 'ow—any thing, in short, rather than nothing.

[&]quot;A pernicious and dangerous practice exists in all the Aland Isles, as in former times in England, although justly prohibited in Sweden,—that of covering their floors with straw during the Christmas season, by way of garniture. The sparks and blazing deal splinters from their fires, falling upon the floor, frequently kindle the straw, by which means not only houses, but whole villages, are burned."

CHAP. x. found nothing in the appearance of the rocks to explain the cause of the appellation. There is not a trace of any volcanic matter. The geological features here, as usual in all this district, were formed of granite; with veins of very coarse marble, which in some places rises to the surface, and forms the bed of the soil. As we left Brandö, a sight was presented which we may vainly attempt to set before the reader in all its novel varieties and living colours. Extraordinary church service had just ended: and at this season of the year

Congregation for Divine Service.

the congregations are so numerous, that one only wonders how so many people can be accommodated with a place for their devotions. Persons of all ages and sexes were coming from the sanctuary of this little island, and about to disperse to their distant homes. We met the Clergyman, in the midst of his numerous congregation, habited in a peasant's dress, like the rest of his flock. Upwards of an hundred sledges, to which wild and beautiful horses were harnessed, were seen presently in motion; and they might be said, like so many vessels, to be literally "getting under weigh;" for they all took to the sea; where, being extended upon the ice in a long line of procession, they formed a most singular sight'. If it had not been for the swiftness with which this vast retinue moved, it might have been compared to a caravan crossing the desert. To us the spectacle was particularly interesting; because it exhibited, in one view, the population of almost all the different islands around Brandö, the natives being all in their holiday attire. Their sledges, containing whole

⁽¹⁾ See the Vignette to this Chapter.

whole families, were drawn by those fleet and beautiful little CHAP. X. Finland horses, of which mention has been already made, in a former part of this work. We overtook them upon the ice, in full gallop; the peasants who drew our sledges being as anxious as any of the party to fall into the train, which now reached nearly three English miles. They had all taken their whet of brandy, as usual, after divine service; and the coming of strangers among them, at this moment, adding to their hilarity, such racing commenced upon the frozen main, as reminded us of antient representations of scenes in the Circus and Hippodrome. Here were seen female charioteers contesting speed against their male companions; sledges overturned; the young and old of both sexes tumbling out and sprawling upon the ice; horses breaking loose from their trappings, scampering off in all directions; other peasants, having gained the van, flying off as fast as their fiery, snorting steeds could fly with them,—laughing, shouting, In this manner and bidding defiance to those behind. we began the passage of the Vattuskiftel, a channel of Vattuskiftel. the sea as wide as that of the Delet, and in which there is always a strong current towards the Baltic. The distance across, in a direct line by water, is not more than eighteen English miles; but, owing to this current, the ice was not passable in a straight course; and we were compelled, as usual, to make a circuitous route, that nearly doubled the distance to Varssala (pronounced Vartsala). As we proceeded, the immense throng of sledges was gradually dispersed; and at length we found ourselves once more alone upon the wide surface of the frozen sea. About half way over, we met

Bursting of the Ice.

a party coming from the Finland shore, loud in their murmurs about the state of the ice, which they said had opened upon them near the land. We presently found this to be true: upon coming to the part of the passage they alluded to, the water appeared gushing through a chasm two miles in length. This opening had taken place with an explosive noise, as of a cannon firing. One part of the ice, in settling, was now below the level of the other; and the continual vibratory motion of that upon which we travelled, yielding to the pressure of the horses' feet, convinced us that it was not frozen to any great depth. Whenever this is the case, and the least alarm prevails, the first caution a traveller ought to use is, to prevent, if possible, the affrighted peasants from huddling together in a mass,—which they are very apt to do, collecting their horses and sledges all upon one spot. It is very difficult to make a Finlander sensible that his own weight is of any importance upon such occasions. Fifty of them will crowd together, to consult upon the best method of getting out of the danger, and thereby render it more imminent. consequences are obvious. In this manner it was that a gentleman, going towards Finland, was merged with his sledge and horse but a few days before our coming. His own life was saved, by the dexterity of the guides,—who shew great skill in rescuing persons when the ice has given way; but the sledge and horse were lost. Even the day before, on the morning of the author's expedition to Sattunga, another traveller lost all his baggage, owing to the same imprudence and want of caution, when crossing the ice by the Lappvesi Passage: the peasants, finding the ice grow weaker and weaker.

weaker, became alarmed, and crowded together round the CHAP.X. sledge containing all his effects, which presently fell through the surface, and sunk to the bottom of the sea. Fortunately, no lives were lost.

It was dark when we arrived at Varssala, and entered a Varssala. dirty wretched hovel, without any accommodation for travellers; and yet this is almost the only place marked for their reception between Kumlinge and Abo. There are not more than twenty-five habitations in the whole island, which is a huge rock thinly covered with a meagre soil. The food of the inhabitants seemed to consist of nothing more than black bread, a nauseous kind of beer, and bad salted-fish.

We read the lamentations of many who had left a memorial of their regret in being confined to this detestable spot, where there is nothing in the houses superior to what is found in the worst dwellings of the Laplanders'. The natives here began to speak to us only in the Finnish language. was but one man who could converse with our Swedish interpreter, or comprehend any thing of what he said. manners

⁽¹⁾ See the entertaining account given by Porter, of his long penance in this place. (Travelling Sketches in Russia and Sweden, vol. II. p. 89, &c. Lond. 1809.) "I entered," says the author of that work, "a hovel, fitter to be the den of sea-monsters than a habitation of the human race." Yet in this wretched island Mr. Porter noticed a style of head-dress among the women, which may often be observed in the best Greek sculpture; and which he describes as peculiar to the women of Varssala; -- "the hair being drawn up to the top of the head, and there rolled into a sort of knot: smoothed at the sides, and well plastered with beer, it not only receives a polish from the liquor, but is kept steady in its shape. Round this mass of hair, on the crown, is fixed a kind of diadem, composed of beads, bugles, &c. of various colours; which ornament completes the coiffure; the whole having the air of a Greek head-dress, more like a nymph of Paphos than of Warsala." Ibid. p. 93.

Revolting manners of the Natives.

manners of the people were so revolting, that one hesitates in giving the description of any thing so disgusting. The glasses put on the table were dirty; and this being mentioned, they attempted to clean them with spittle. A woman, who entered the chamber with a saucer of butter, not only blew her nose upon her fingers, but into the palm of her hand; and then, wiping it upon her petticoat, proceeded to handle all the provisions that were set forth. If it were a question, Which is the more tolerable, the filth of Italy and the South of France, or that to which a traveller is exposed in the North of Europe? an answer would not readily be made. In warm climates, it is as difficult to avoid vermin as it is to escape from villainy. In Northern regions, there is more of honesty, but sometimes the barbarous condition of the inhabitants causes them to betray the most disgusting manners:—and where is the Englishman who can fortify either his nerves or his stomach, so as to regard with indifference the most beastly propensities? Neither the houses nor the persons of the natives in the North of Europe, if we except Russia, swarm with vermin as in Italy; although they be not destitute: but the climate is unfavourable both to their increase and activity. These nameless insects, in Sweden and Finland, like the inhabitants themselves, are few in number, but heavy and gigantic in their size'.

Oh

⁽¹⁾ At Varssala, however, they cannot be said to be "few in number." After the Author of the "Travelling Sketches," before cited, was driven back to this island, he thus writes of its filthy state: -"Here then I am again, with the happy prospect of passing, Heaven knows how many more days! in cold, filth, and famine. I wish the sea would, some time or other, do this island the favour of a thorough washing: and then I am sure more living creatures of the creeping and jumping species would be drowned in the flood, than ever filled the waters at the general deluge." Itid. p. 92.

Oh England! decent abode of comfort, and cleanliness, and CHAP. X. decorum !--Oh blessed asylum of all that is worth having upon earth!-Oh sanctuary of Religion, and of Liberty, for the whole civilized world!—It is only in viewing the state of other countries, that the advantages can be duly estimated! -May thy sons, who have "fought the good fight," but know and guard what they possess in thee!-Oh Land of happy fire-sides, and cleanly hearths, and domestic peace; of filial piety, and parental love, and connubial joy; "the cradle of Heroes, the school of Sages, the temple of Law, the altar of Faith, the asylum of innocence," the bulwark of private security and of public honour!

> "WHERE'ER I ROAM, WHATEVER REALMS TO SEE, MY HEART, UNTRAVELL'D, FONDLY TURNS TO THEE!"

In this miserable place, Varssala, we may be considered as having entered Finland once more; and, what is worse, of bidding a final adieu to Sweden. In the course of our long Valedictory account of the country and its inhabitants, it will be seen, that, the Sweder. with a strong predilection for the comforts and advantages of England, we have spoken favourably of the Swedes; - and perhaps for this reason, that they so strongly resemble Englishmen in all they do and say. As for their natural rudeness of manner, we were soon taught, that what belonged to them as a characteristic of the whole nation, and is in itself harmless, might well be tolerated. We often heard foreigners,

⁽¹⁾ Sermon by H. V. Bayley, A.M. Fellow of Trinity College, Cambridge, p. 14. Manchester, 1803.

CHAP. X. foreigners, and especially the French, when speaking of the Swedes, complain of the impossibility of enduring the freedoms of which they are guilty towards strangers; but we considered this trivial fault as more than overbalanced by their many valuable virtues—by their love of truth, and honesty, and hospitality, and bravery. Some few things must be conceded to a Swede; and you make him your fast friend, and the most kind-hearted and generous of men. He must be allowed to enter into your apartment, unbidden, and unknown, upon the moment of your arrival, without any form of introduction or ceremony; to seat himself at your table; spit all over your floor; fill your chamber with tobacco-smoke; ask your name, your rank, your profession, your age, your country, your character, your business—all your present and future plans; where you have been, what you are doing, and whither you are going;—finally, what you think of Sweden. answered all these questions, sometimes without his caring at all about your replies or attending to them, you will find yourself upon even terms with him. His house, his horses, his equipage, his servants, his time, his company, his advice, and very often his purse also, all are at your service, and entirely at your command. He will make common stock with you, and freely share with you whatsoever he has. Thus, although, in viewing his character and manners, we may sometimes find a little ground of complaint, yet we cannot see any thing seriously to condemn. It is in tact, and not in morality, that the Swedes are deficient. Often, when they have travelled and learned more of what is called 'refinement,' they lose something of their more estimable qualities.

Our journey from Varssala the next morning (January 2) CHAP. X. was one of extreme suffering; and perhaps few English travellers ever encountered one of greater trial. The reports made by the peasants and by our servants, at starting, had prepared us to expect very severe cold; and the mercury in Fahrenheit's thermometer, after being exposed only for a few minutes in a sheltered situation near the house, had fallen 46° below the freezing-point; and afterwards, when more Fahrenheut's exposed to a north-east wind, which blew with violence, 52½° below to $52\frac{10}{9}$ before sun-rise. Yet, as any thing was preferable to remaining in the wretched and unwholesome hovel where we had passed the night, we resolved to brave all the inclemency of the weather, and set out, at eight o'clock, in open sledges. We had used every possible precaution, as to additional clothing; but it was all to no purpose. When for a moment exposed to the atmosphere, a sensation in our cheeks like that of being scorched immediately took We covered our faces with silk handkerchiefs, drawn over them in such a manner as to leave the smallest possible aperture for respiration: the consequence was, that the inside of the handkerchief became coated with a plate of ice, which, sticking to the skin and not melting, 'could not be removed without excoriation. We had to cross a frozen channel of the sea, called the Turvesi Passage; a narrow strait; but being open towards the north-east, we were exposed to all the fury of the blast. In a short time the author found that his left eye was so frozen that he could not by any effort separate the eyelids, and he began to be fearful that the right eye would also close. At this moment

Thermometer

Turvest Passage.

there

CHAP. X.

Accidents from the Frost. there came on a sudden squall of wind; so piercing, that a languid stupor and sleepiness seized us all, and there was reason to apprehend the freezing of the blood in our veins. It was followed by a cry from our Swedish interpreter, that our English servant's face was frozen. We hastened to his assistance; and found the poor man almost insensible, with two large spots upon one of his cheeks, as if patches of white paper had been stuck on. Our peasants knew very well what these spots were, and how to treat them. We began instantly the application of snow, which is always resorted to in such cases,—rubbing them with handfuls of snow, until they disappeared; but, to our dismay, new spots appeared, in fresh places, as fast as the old ones were removed. The interpreter's nose, during the operation, turned as white as the snow itself; and one of the peasants had a spot that covered his cheek and one side of his nose. The only danger, when these accidents occur, arises from being alone, and having no companion to witness the spot and give the alarm; as the person attacked is insensible of what has taken place; and if he should enter into a warm room with one of these spots, the white colour becomes livid, and an open sore instantly ensues, which sometimes mortifies, but always, even after it is healed, leaves a black scar behind'. Our poor little dog, that lay in the bottom of one of the sledges, wrapped up in woollen, and as carefully guarded from the atmosphere

⁽¹⁾ The drivers of sledges in *Petersburg*, from their carelessness in going with these spots upon their faces into warm drinking-rooms, are always liable to such sores; and appear frequently with their faces disfigured by the black scars, for the rest of their lives.

atmosphere as possible, had one of his hind-legs frozen so CHAP. x. stiff, that it stuck to his belly as if it had been glued, and we could not remove it. In this dilemma, we found that it would be madness to continue much longer thus exposed; and we made all possible haste to reach the village of Leosari, which was hard by; where we entered a house, the owner of which was known to our guides, and where the worthy family hospitably received us all. They first cautioned us against venturing into a warm room: notwithstanding which, our English servant found the temptation too strong to be resisted, and imprudently entered a chamber where there was a heated stove. The consequence was, that his face almost instantly became blistered and very painful; and in a few hours, a thin purulent ichor flowed from the wound. Every one of the party who had been attacked by the white spots had blisters upon the skin, although snow had been used as soon as the spots were visible; and the mildest consequence was the peeling off of the skin.

At ten o'clock A.M. this day, we placed our thermometer in the yard before the house, exposed to a north aspect. The mercury fell to 40° below the freezing-point; and we afterwards found that, at the same hour in Abo, it had fallen to 30° below 0, of Celsius; which is equivalent to $22\frac{1}{2}^{\circ}$ below zero of Fahrenheit, or $52\frac{1}{2}^{\circ}$ below freezing. In that severe moment before our arrival at Leosari, when we all suffered so much, and were exposed upon an open field of ice, it was perhaps much colder, as the sun was then just rising. According to the Swedish calendar, it rises at this time of the year at ten minutes after nine, and sets forty minutes after two.

These

CHAP. X.

Helsing.

Himou.

Vinkila.

These delays prevented all possibility of our reaching Åbo before the next day; but we continued our journey over the ice; and came to Helsing, which is upon terra firma; where we were once more landed in Finland. Afterwards, we passed through Himois; and put up for the night in the village of Vinkila. Between Varssala and Åbo there is nothing that may be called an inn; nor, indeed, any place of rest and accommodation for travellers. At Vinkila, wanting a house of this kind, we prevailed upon a widow lady to receive us into her dwelling for the night, upon condition of our paying for every thing, as in a regular Gastgiffware gard. Having assented to our proposal, she provided us with a decent lodging, and treated us with great kindness.

Action of atmospheric air upon vapour. The frost had been this day so severe, that the horses, whenever we halted, began to bite off the icicles that were formed upon their knees in an extraordinary manner. Whenever the door of our apartment was opened, the rushing in of the cold air caused a very remarkable phænomenon, by converting the warm vapour of the room into a whirling column or cloud of snow, which, being instantaneous in its formation, was turned round with great rapidity. We availed ourselves of this opportunity to examine the arrangement of the spiculæ in the particles of snow,—as likely to illustrate the crystallization of water,—by placing sheets of dark-coloured paper, on which the snow, thus formed, might fall. The beautiful appearance of the ice, collected as it fell, resembled, although upon a smaller scale, that which is presented by a number of the

the seeds of the common carduus or thistle, when they are sur- CHAP. X. rounded by diverging fibres of the egret or down;—that is to say, a number of radii, diverging from a central point, were held there by a power of attraction exerted by crystalline forces in these particles of water passing from the fluid to the solid state. We had not then observed the more regular appearance of the snowy stars with six equal radii, which descend from the higher regions of the air when the atmosphere is calm²; or we might have been convinced that we had in these less-perfect forms a decisive proof of the crystallization of water; and that hydrogen oxide, which is only another name for water, obeys the same laws to which all other oxides are liable'.

In this house we found a Mr. Elmgreen, from Abo, who State of traagreed to accompany us, upon our journey thither on the Finland. following day. From him we learned, what indeed we already found to be the case, that, in travelling this route, beds are a species of accommodation never found. The traveller must put together such things as he can collect; and lie down upon a table, or a few boards put together to raise him a little above the floor, which is seldom in a state for him to make his bed upon. But there is no part of the world where a traveller will fare worse, in this respect, than in passing through the South of Finland to Petersburg. We had called at a Clergyman's house near Himois, in our journey this day, to see if it

were

⁽²⁾ See Part I. (Vol. I.) p. 11. Cambridge, 1810.

⁽³⁾ See a complete confirmation of this truth, in the account given of regular rhombi subsequently exhibited by crystals of ice, in the "Transactions of the Cambridge Philosophical Society," Part II.

CHAP. X.

were possible to find accommodation; but the scene of wretchedness and dirt within his mansion was such, that we never even hinted at the cause of our visit. In the dwelling of our present hostess we had less reason to complain; and her kind attentions would have made worse fare tolerable. We found that it was a part of the economy of the family to knit worsted stockings for sale; and we bought some, at the rate of one shilling English the pair, which were of an excellent quality.

The next morning, January 3, we set out for Åbo; first estimating the state of the thermometer at nine o'clock A.M. The mercury, according to Fahrenheit's scale, had then fallen to sixteen degrees and a half below zero, or forty-eight degrees and a half below the freezing-point. Our first place of relay was a village called Laitis, which we soon reached, as the distance was not more than three English miles and a half. Our next stage, to Tursanpare, was performed with difficulty, the road being blocked up by the snow; in consequence of which we were compelled to make a rambling circuitous expedition, pulling down hedges, and making our way through the fields.

Laitus.

Tursanpare.

Tursanpare is rather a large village: and here we were agreeably surprised at seeing, as in England, a sign-post and sign to denote an inn. Our companion shewed us into a room, where he called for burnt-brandy with sugar and ginger in it; a mode adopted in the country of making the abominable brandy everywhere met with rather more stomachic and palatable. From Tursanpare we continued our journey to Niemenkylä and Nussis-Nummis, distant only fourteen English miles from Åbo. Our Swedish companion,

Niemenkylä.

who, in his sledge, was wrapped up in blankets, quilts, CHAP. X. pelisses, all sorts of woollen and skins, and wore a fur cap upon his head covering his ears and cheeks, rallied us upon our disregard of the cold weather, seeing that we had less clothing, and sometimes cast off even our cloaks; saying, "It was so like Englishmen, to go about naked." But the fact is, that when there is no wind, and the sky is perfectly clear, however diminished the temperature may be, the air is so dry, that a sensation of chilliness is rarely experienced while a person continues in motion, and does not render himself liable to the attacks which take place in going suddenly from a warm room into the cold air.

At Nussis-Nummis we were detained a short time for horses. Nussis-We afterwards set out once more; and proceeded to ABO, where we arrived as it was getting dark. Upon our entering Arrival at this Town and University, the first thing that struck us was the unusual sound of bells, upon all the horses drawing sledges about the streets. The inhabitants pay their visits attended by this kind of music; and generally in sledges, which are made to close up like our carriages. Upon our arrival, we went to an inn kept by a person of the name of Scippell, as being the largest and best in the place. Here being conducted into a very spacious and lofty chamber, used as a public card-room, adjoining to the ball-room, and finding that it was to be heated by means of two stoves, one at either extremity of this cold apartment, we ordered fires in . both of them. When the wood, which had been used as fuel, was so far consumed that only the clear embers-remained, according to the common custom in the country, we closed

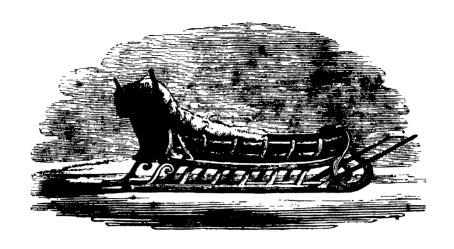
the

CHAP. X. the chimneys by means of an iron slider there placed for this purpose. If the inhabitants close up their stoves that the embers may send out heated air into the room, they are always careful to watch lest any appearance of a blue lambent flame upon the wood coals should remain, in which state it would

from suffocation.

Narrow escape be dangerous to shut the sliders. Unfortunately, not being aware of this critical symptom,—which, in fact, denotes the formation and disengagement of carbonic acid gas, -- and finding it difficult to warm so large a room at all, we stopped up the chimneys as soon as we could do so without filling the room with smoke; and the consequence was, that we very narrowly escaped being killed. The author first felt the attack: it came on with great coldness in the extremities, and a tendency to sneeze; followed by a general sensation of shivering over the whole body, and violent head-ache. Presently, he fell senseless on the floor. His companion, being roused by the noise, and finding him in this situation, attempted to raise him; but was by this time also similarly affected, and had barely strength enough left to call in the servants, who alarmed the people of the house. Luckily, there happened to be in the inn, as a lodger, a young man who was an itinerant Lecturer in Natural Philosophy: as soon as he came into the room, in which many were now assembled, he perceived the cause of the accident, and immediately drew back the iron sliders which had closed · the chimneys, and opened the doors. Two persons had lost their lives in the same chamber but a short time before. and from the same cause. This young man told us that similar accidents occur frequently, in winter, among the peasants;

peasants; the chimneys in all their houses being constructed CHAP. X. with a sliding-board, to close over the embers of burning wood: but as the severity of the climate always tempts them to shut their chimneys before the carbonic acid gas has completely effected its escape, the most fatal consequences ensue. Their mode of treating persons under these attacks is, to carry them out naked into the open air, and rub their bodies with snow until the vital functions are restored. We felt the bad effects of this accident in violent head-ache, which lasted during many days afterwards.



CHAP. XI.

ÅBO.

its Commerce—Visit to the different Professors—Frantzen—his genius for poetry—Specimen of one of his Odes—Porthan—Account of the University—Difficulties encountered by the Professors—Disasters to which Åbo has been liable—Cathedral—Ludicrous mistake—Effect of an Organ upon some Natives of Savolax—Interesting Cippus in the Chorus Tottianus—Statues and Pictures—Inscription in memory of Catharine, Widow of Eric XIV.—Historical Documents concerning this remarkable Woman—Swedish Legend upon her Daughter's coffin—Manuscripts preserved in a brazen coffer—Histories of Eric's Reign—Portraits of Luther and Melancthon—Image of Henry the Martyr—Chapel of Olaus, Bishop of Åbo—Monument of a Scotch Officer—University Library—Manuscripts—Typographical Rarities—Theatrum Anatomicum—Auditory of Disputations—Professor

Professor Gadolin-Collection of Minerals-Professor Hellenius-Botanic Garden — Hellenius's private Collections — Comparative Estimate of the two Universities, Upsala and Abo-State of Society.

ABO ranks next to Stockholm and Gothenburg, in point of CHAP. XI. grandeur; and, if we except the two last, is the largest town State of Abo. in all Scandinavia. It contains ten thousand inhabitants: whereas the city of Upsala has only three thousand. Its trade is very considerable; and is carried on chiefly with the interior parts of Finland, of which country it has long been the metropolis. Cut off by its situation from any frequent intercourse either with the Academies or commercial cities of Europe, its very name, as a University, rarely reaches the literary circles of the world: yet it boasts of many distinguished men, whose talents have fitted them to shine among the higher classes of polished society. Its men of letters would have done honour to any seat of science. All the towns on the Finland, or eastern, side of the Gulph of Bothnia, from Abo to Tornea, are magnificent, when compared with those on its western shore; although they enter into no comparison with the towns of England, France, Italy, Germany, and Holland: therefore the term magnificent can only be applied, to any of them, in the comparative manner here specified. country on the Finland side of the Gulph is better cultivated, and more fertile; of course, the inhabitants are more numerous, and richer. It was always considered as the great granary of Sweden; and of more consequence, as a possession to their kingdom, than the whole of Norway. Its trade has generally been abundant and flourishing. The merchants of Abo, Wasa,

Gamla

CHAP. XI. Gamla Carleby, and Uleaborg, are persons not only of local but of national importance and consideration: they carry on trade upon-a very extensive scale, and to the most distant regions. But upon the western side of the Gulph, if we except Gefle, commonly pronounced Yavely, there is hardly an individual who may be considered under the respectable title of a merchant.

> As it was probable that our stay in this place would be of some duration,—both on account of our being obliged to wait for the arrival of our carriage, and also from our curiosity to make ourselves well acquainted with the University of Abo, its Professors, discipline, and state of science,—we sent our interpreter, the day after our arrival, to hire lodgings; and were soon provided with a very neat set of apartments, having three rooms en suite, besides accommodation for the servants, at the price of two rix-dollars, or four shillings English, per day including fire and candles. Accordingly we moved from our inn; and had scarcely taken up our abode in these comfortable chambers, when we received a visit from our former companion, Mr. Elmgreen; who told us that the different Professors, to whom we had letters of recommendation, were at their houses, and would be very glad to see us, and to shew us every attention in their power. This kind message convinced us that we were still within the limits of Swedish hospitality: and we set out to pay our respects to all of them; beginning with the celebrated Poet of Sweden and Finland, Professor Francis Michael Frantzën; of whose beautiful Finnish Ode, called Pojkarne, both a Swedish and a Latin translation were given in a former

> > volume.

Professor Frantzen.

Frantzën was Professor of History and the Belles CHAP. XI. volume'. Lettres. We had before seen him at Gamla Carleby, during our journey in the North of Finland, when he was in search of a wife, as we have before mentioned. Upon the occasion of our present visit, we found him in his little study, surrounded by his books; among which, to our surprise, we observed Addison's Spectator, the works of our poet Gray, Cowper's Poems, and several other of our English Poets, all in their original language. Observing that we noticed his collection of English Authors, he said, "We Scandinavians are able to appreciate the beauties of English literature, because the thoughts and feelings of your writers are so nearly akin to our own." The truth of this remark will best be exemplified by an effusion of the Professor's own muse, taken from one of the public Newspapers, which he kindly presented to us, upon our asking him for a specimen of his poetry'. It has all the characteristic pathos of English poetry; being, in fact, composed in the style, and nearly in the metre, adopted by some of our own Poets; such, for example, as Gray, in one of his Odes'; also Merrick', Cotton', Burns'; and also by Miss Carter.

Also on the 65th Psalm-

⁽¹⁾ See Vol. V. Chap XIV. pp. 532-535. (2) Ibid. p. 517.

⁽³⁾ The "Stockholms Possen, (No. 214.)" for Thursday, Sept. 19, 1793.— "Thorsdagen, den 19 September, 1793." It had, for signature, the initial and terminal letters of his name, thus written: "F—n."

⁽⁴⁾ See Gray's Ode, "'Twas on a lofty vase's side," &c. Vol. I. p. 6. edit. by Mathias.

⁽⁵⁾ See his Paraphrase of the 122d Psalm-

[&]quot;The festal morn, my God, is come."

[&]quot;Ye works of God, on him alone," &c.

⁽⁶⁾ See his Fire-Side: "Dear Chloe, while the busy crowd," &c.

⁽⁷⁾ See his Ode on Despondency: " Oppress'd with grief," &c.

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CHAP. XI. Carter, and by Mrs. Barbauld, in their odes and hymns. Many other instances, and perhaps some of a higher cast. may occur to the Reader's memory; but these happen to be here recollected, and will suffice to shew the analogy. One of the most striking beauties of the Swedish poetry will not, however, be found in any of these examples; although occurring in Professor Frantzën's Ode; namely, the dissyllabic rhyme: of this we before introduced a striking instance in Pojkarne; where, for want of an analogous specimen in our own language, the author introduced his own imitation of it, in an Ode to Enterprise', modelled after the Swedish taste. subject of Professor Frantzën's ode, which we shall insert in the original language, accompanied by as literal a translation as possible, is this: - Manniffans Unice (" The Human Face or Countenance"). It is addressed to Selma; and consists of eleven stanzas, written in the manner already noticed, but with the dissyllabic rhyme at the end of every line, except where the rhythm alternates. A literal translation of it in analogous English

"To me thy better gifts impart," Each moral beauty of the heart, By studious thought refin'd: For wealth, the smiles of glad content; . For power, its amplest best extent, An empire o'er my mind."

⁽¹⁾ See particularly Miss Carter's beautiful "Ode to Wisdom;" from which the following stanza may be selected as an instance:-

⁽²⁾ See Mrs. Barbauld's "Hymn to Content:" "O Thou, the Nymph with placed eye! O seldom found, yet ever nigh! Receive my temperate vow!" &c.

⁽³⁾ See p. 536 of the former Volume.

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English metre, would be difficult, if not impossible. We must therefore be contented with a correct translation in English prose; being sensible, at the same time, of the utter impracticability of giving any idea of the poetry by such a version. The Ode, when converted into English prose, loses all its beauty, and becomes almost as grotesque as the French prose translation of the Odes of Gray. The original, therefore, is inserted in a Note'.

THE HUMAN COUNTENANCE.

Specimen of one of Prof. Frantzen's Poems.

ODE TO SELMA.

I.

"The sixth day of TIME had spread its purple veil over the cedar forests: the butterfly, on its golden wings, wafted over murmuring brooks, kissed the rose in its bower.

11. "Orient

(1) Männistjans Antete.
Obe til Gelma.

Redan hann, fin purpurstöja öfwer Cederstogen höja, Tidens sjette Dag. Guldbewingad, öswer bäcken, Fjäriln flög til rosenhäcken, fyste deß behag. CHAP, XI.

TT.

"Orient pearls beamed in the watery mirror: the white sails of the swan shone in the shadowy strait: wine reddened in the grape: the dove, tender and innocent, wantoned in the groves of Eden.

III.

"But Nature's highest beauty was not yet: the crown of Creation was wanted; until man, from the dust arose, lifted his countenance in the light of day, and his eyes were opened.

[It is almost impossible to paraphrase the next stanza: to substitute the word Aurora for Frantzën's simple and expressive Morgonrodnan, would be forlorn indeed. So also the words Enon ra fiauen are but feebly rendered by Alpine Snows; the word Fiai applying to those lofty ridges upon the summits of the highest mountains, where, as upon Lebanon, the unmelting snow exhibits a splendid whiteness, that can only be conceived in the mind of persons by whom it has actually been beheld.]

u.

Parlan sten i wattnets spegel; Mwita, glanste Swanens segel, i et stuggrift sund; Winet glodde rodt i druswan; Om och menlos, lefte duswan, uti Goens lund.

III.

Men den högsta stönhet fettes i naturen—fronan fettes am i stapelsen; til des Mänmistjan ur gruset hof sit anlete i ljuset, bof opp ögonen. IV.

CHAP. XI.

"The snow of the Fjåls was outwhitened: the morning, outreddened, sunk behind the mountains: the star of day hid its diminished lustre.

v.

"To that up-turned countenance which regarded the firmament, all the animal race paid homage; to those eyes, where Loves and Graces smiled, and in which immortal Hope beamed through the tears of sorrow.

vı.

"All the angelic choir saw with amazement the speaking beauty of the new creation, and looked at the Creator; who impressed it with his own image, beheld his work, and 'saw that it was good'.'

IV.

Snon på fjällen holl ej färgen: Morgoprobnan bakom bergen fonk fördumklad ner: Stjernan, som i dagens panna satt få skon, ej wille skanna besver jorden mer.

v.

Djuren hollande fig bojde for de ogon, som sig bojde ifrån stoftet opp; der behag och färlet myste; der bland sorgens tärar lyste et obbbligt hopp.

VI.

Unglaffaran står betagen, fer de talande behagen, och på Sfaparn fer. Sfaparn tructe sit insegel på sit werk; och i den spegel fer sin bild, och ler.

^{(1) &}quot;And smiled" would be nearer to the original: but, this slight deviation, as appropriated to the language of Scripture, without altering the sense, may perhaps be tolerated.

CHAP. XI.

VII.

"Ye that consider all things but as results of chance! hie ye to the fountain, and, having beheld your own visages reflected, blush, and retire.

VIII.

"Behold the countenance of the sage! view the image of all that is true, noble, and useful! Catch a glance from the eye of the hero! mark the lineaments of courage, grandeur, and sublimity!

IX.

"Then look on the face of beauty, gentleness, benignity! Lift my Selma's morning veil from her blooming cheek! See the tender and bashful expression of her eyes! Behold the dark ringlets of her hair, flying careless in the wind.

VIT.

I som skriken: "bet ar ingen som gett ordningen at tingen;
Slumpen skalbe dem;"
Darar! blott til kallan skigen:
seen ert anlete, och tigen,
rodnen, och gan hem.

VIII.

Se den gamle Wifes panna: fe en taffa af det fanna, ádla, nyttiga.
Se en blick ur Hjeltens oga:
Se et elddrag af det hoga, flora, driftiga.

IX.

Och det stona, mitda, tjuswa?— Lyft min Selmas morgonhuswa från deß purpurfind. Se deß ögon!: ömma, bluga! Se deß morka lockar sluga, sorglöst, for en wind. x.

CHAP, X1.

"O master-piece of nature! Link connecting angels with men! Image of God! art thou not, Garment of the Soul, destined to follow her into the regions of eternity?

XI.

"Yes! ah, yes! angels shall themselves be moved by the regard of Selma, when they hear her voice amongst them. My Selma! In the Hall of Heaven!—in the valleys of Eden—I shall look on thee!"

Many other poems of Professor $Frantz\ddot{e}n$ lie scattered among the almost-forgotten Newspapers of $\mathring{A}bo$ and Stockholm: for the expense of printing in this country is such a bar to their being collected and published together, that no other printed copies of his works can be referred to. In the

x.

Masterwerk uti naturen, lank fran Anglarne til djuren, Gudabetate! Själens tarf i dödligheten; går du ej til ewigheten, Manskjoanlete?

XI.

Ach! ja: Anglar am ffat rora Setmas upfon; då de hora hemes roft bland fig. Setma! am i bimtens fatar Inn i Elofeens datar, får jag fe på dig!

⁽¹⁾ In the original, "i hintlens falar;" in which expression we may perhaps recognise as it were an involuntary allusion, on the part of a Scandinavian poet, to the old Gothic mythology of his ancestors, the Valhalla, or Hall of Odin.

CHAP. XI. the Abo Gazette, called No Zidning, published while we were in Abo, there appeared a long poem, which he also acknowledged as his composition'. Without a knowledge of the Swedish language, it is impossible to form any correct idea, either of their merit or demerit. But Professor Frantzen also wrote poetry in the language of Finland, being himself a native of that country: and among the Swedes he was always esteemed as the best poet they had. In a note to the latest of his poems, which we have now mentioned, he says, that Finland, in the Finska language, is called Suomis.

. After this visit to the *Professor of History*, we went to the

Parthan.

University.

house of the most learned scholar in the University, Henry Gabriel Porthan, one of the Professors belonging to the Faculty of Philosophy, and styled, in the Index Prælectionum of the University, the Regius Professor of Eloquence. Account of the University of Abo consists of a Chancellor; a Vice-Chancellor; the Professors, and their adjuncts; Magistri Docentes; and teachers of modern languages, fencing, and music. The Chancellor, at this time, was the Count Charles Adam Wachtmeister; its Vice-Chancellor, Doctor James Gadolin, Bishop of Abo: and the names and titles of all the Professors are given in the Appendix to this Volume². It is usual

⁽¹⁾ The Mbo Tibritia made its appearance, for the first time, on Wednesday, Jan. 8. 1800: Nos. 1 and 2 being published together. It was in these first numbers that we saw this poem by Frantzen, entitled Finlands Upolling; in which, speaking of Finland, he says-

O mina fåders bogd 'o Kintand 'sfat omsider Du afwen lufta dig bland jordens lander opp.

⁽²⁾ See the Index Prælectionum, in the Appendix.

usual here, as in other Universities, for those who hold CHAP. M. public disputations in the Schools, to read, in Latin, a written Thesis: which Thesis, however, in Abo, does not necessarily relate to the subject of their public exercise; but being paid for by the Student who keeps the Act, and written by one of the Professors, and afterwards printed, enables the Professor, if he choose, thus to publish one of his own Dissertations. We found Professor Porthan engaged in carrying on a work of this kind: and the manner in which he accomplished it will serve to shew the nature of the obstacles which all the Difficulties Professors here have to encounter; wanting those facilities of by the Procommunication with the literary world, which are found in Universities endowed with larger funds to defray the expenses of printing works of science. He had prepared a new edition of Bishop Juusten's " Chronicon Episcoporum Finlandensium," illustrated by his own valuable notes; in which there are frequent allusions to the history and antiquities of Finland. This work he presented to us, in the form of a bundle of printed Theses, which he had thus prepared for the use of the Students': and it is owing to his kindness that the author was able to collect also a series of the Academic Dissertations of the University

of

(3) This work is thus mentioned in a Note to the "Specimen ilistoriae Litterariae Fennicæ," one of the Theses printed at Abo, in 1793. "PAULUS JUUSTEN auctor est Chronici Episcoporum Finlandensium, quod primus vulgavit ill'. NETTELBLADT (m Schwedische Bibliothef, Erstes Stuck, No. 2. p. 62-90.) jam vero iterum cum Annotationibus uberrimis editum a cel. Prof. Porthan, cujus operis xxx Particulæ hucusque prodierunt."—This work being completed at the time of the author's arrival, Professor Porthan presented a copy of it to him; and the author has since transmitted it to Edinburgh, to be deposited in the Library of Advocates there. It is perhaps the only copy of it extant in Great Britain.

CHAP. XI. of Abo, for nearly half a century. An examination of the principal subjects treated of in these Dissertations will enable the Reader to form for himself a tolerably correct estimate of the state of science in this seminary of education for the youth of Finland and Sweden, of which we shall have more to say in the sequel. The fate of such a scholar as Porthan is greatly to be regretted by the literary world; because, being a native of Finland, and deeply versed in all that related to its history and antiquities, and himself an accomplihsed scholar, well read in other branches of history and antiquities, he possessed the ability, if he had possessed the means, of giving information to the world upon a subject of all others the least known; namely, the origin of the Finlanders' and Laplanders. He spoke the Latin language, as if it had been his mother-tongue; but with that peculiarity of pronunciation belonging to all foreigners, and with a degree of volubility which rendered it sometimes difficult to apprehend exactly his meaning. The few facts which were gathered from him, during the frequent conversations we had with him, will of course be stated; but, from the little we thus gained, we could only be convinced of the extent of the loss sustained by the literary world, in not having better means of appreciating his various acquirements. Abo, interdicted from all communication with Petersburg, and having little intercourse

⁽¹⁾ See the List of the principal Dissertations, given in the Appendix.

^{(2) &}quot;Nulla enim illarum, aut in lapidibus, cippisque sepulcralibus, aut in aliis vestustatis monumentis, reperiri potuerunt vestigia." Porthan. Hist. Biblioth. Acad. Aboënsis, p. 3.

intercourse even with Stockholm, owing to the peculiar cir- CHAP. XI. cumstances of its situation, cannot be considered as a favourable spot for the interests of literature; yet such has been the

presently allude, have caused their names, in spite of every obstacle, to be heard in the more-favoured walks of science. The history of Abo is of considerable antiquity; but few

places have been more liable to vicissitudes, or exposed to

merits of its Professors, that some of them, to whom we shall

greater devastations. During the wars of Sweden and Russia, Disasters to

it has often been sacked and laid waste: we are not, there- which Abo has been liable. fore, to wonder that few monuments of its antient state of dignity are now in existence. Even the bricks of which its buildings consisted were carried off by the Russians, and taken to Petersburg; the first-built structures erected in that city being made of the materials taken from the houses in Abo. Its bridge, constructed over the small river Äcura's (which flows through the city, and falls into the Gulph, at the distance of half a wedish mile from the place), was once a single arch of stone: but this was destroyed by the Russians, from whose ravages Abo has so often suffered; and it is now of wood. All the timber which the Russians found upon the spot, among the buildings and elsewhere, they employed in building the galleys with which they removed the spoils of the city.

The earliest account of Abo is contained in the work of Professor

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⁽³⁾ We have written the name of this river correctly: it is pronounced Aura; and as jocki, pronounced yocky, signifies 'a small river,' it is called Aura-yocky.

CHAP. XI. Professor Porthan, before mentioned; which, however, it is almost useless to cite, as one copy only of the work exists in Great Britain. It is there stated, that, about the year 1198 of our æra, during the episcopacy of Folquinius, the third in order of the Finland Bishops, Abo was consumed by fire, in consequence of the devastations made by the Rutheni, or Russians: whose practice it always has been, when instigated by the desire of plunder, to set fire to the cities, towns, or villages, liable to their predatory warfare; by this means forcing the inhabitants to quit their hiding-places, and come forth with their effects'. Notwithstanding its frequent losses, and the injuries to which it was continually exposed, it began to be considered among the chief cities of Sweden so early as the fifteenth century; carrying on its commerce chiefly with the But from the year 1198, down to this period, the history

⁽¹⁾ His edition of Juusten's "Chronicon Episcoporum Finlandensium." former Note.

^{(2) &}quot;His jam allatis accedit, quod variæ hostium, præcipue Russorum crudeles in Fennia populationes, non modo multa quæ a privatis hominibus in notitiam posterorum annotata fortassis essent, nobis sustulerint, sed varias etiam collectiones veterum documentorum publicas dissipaverint ac destruxerint."

Specimen Historiae Litterariae Fennicae, p. 4. Aboae, Typis Frenckellianis.

⁽³⁾ In this manner they burnt the city of Moscow, in the moment of its capture by the French army: and it has afforded an amusing lesson of the wretched shifts of party in this country, in observing the eagerness with which, after accusing the French soldiers of this act of plunder, a few artful Politicians, who maintain any opinion for interested purposes, suddenly veered round, and endeavoured to establish a belief that the burning of Moscow was a sublime example of LOYALTY and PATRIOTISM on the part of the Russians. Loyalty and patriotism among slaves and thieves!!! Mention this act of Loyalty and Patriotism, Reader! in Moscow, and see how the Russians themselves will laugh at thy credulity!

⁽⁴⁾ PORTHAN, in Annotationibus ad Chronicon Juustinianum, p. 528.

history of Abo is nothing more than a catalogue of disasters, CHAP. XI. conflagrations, and catastrophes of every description. Heaven and earth seemed to combine for its destruction; for after being three times totally destroyed by common fire, it was in the year 1458 destroyed by lightning. After this, in 1473, it was again burned down. In 1509, it was sacked and burned by the Danes. Three successive conflagrations followed, in the years 1546, 1549, and 1552; and as often reduced the city to ashes.

After such a series of calamities, we may in vain look for traces of the magnificent ornaments once lavished upon its Cathedral. These have entirely disappeared: but the structure Cathedral. itself, "PER TOT DISCRIMINA RERUM," marvellously remains, and still constitutes the principal object of curiosity in the place. The style of architecture observed in the interior is Gothic, but the outside exhibits a pile of plain brickwork. The roof is of the most chaste Gothic; that is to say, simple and unadorned, without the intricate combinations and traces of the florid Gothic; but plain, elegant, light, and lofty. The manner in which light is thrown in from side-windows among the arches produces a pleasing delusion. To a person standing at the altar, and regarding the whole length of the nave, not a window is visible; and yet strong masses of light and

^{(5) &}quot;Anno 1509, exercitus Regis Danorum Johannis I. Aboam ex improviso occuparet, totamque urbem hostiliter dissiperet, Ecclesiam Cathedralem multis pretiosis rebus et clinodiis quam plurimis spoliando, et quod hic præcipue nominandum, libros meliores auferrent Dani; qua clade funesta, magnam quoque partem conquisitorum hinc inde litterariorum monimentorum res patrias illustrantium periisse, dubio caret."

[.] Specimen Hist. Litt. Fennicæ, p. 4. Aboæ, Typis Frenckellianis.

CHAP. XI. and shadow, powerfully contrasted with each other, are displayed with wonderful art and effect, such as we had not seen in any similar fabric: which is the more remarkable, as the notion prevalent in Abo is, that this cathedral was built by an English architect. The altar, the principal aisle, and various parts of the building, were crowded with wretched paintings; most of them, it is true, of ancient date, but none of them of the smallest merit. They are placed after the usual mode of arrangement in Roman-Catholic churches. Over the altar is a large picture of the Crucifixion, a wretched piece of daubing. In different parts of the chancel, there are others of a like character: indeed, the whole internal appearance of this Cathedral would induce a stranger to believe that the Roman-Catholic religion was even now professed in Abo. Even the reliques once venerated here are still preserved in the Sacristy; but they are shewn merely as curiosities to visitants. The organ is very large; and its excellence is considered as equal in all respects to its external magnificence2: it stands at the western extremity of the nave opposite to the altar.

Ludierous mistake.

A mistake of ours occasioned much mirth during the first visit that we paid to this Cathedral. As it was our wish to attend Divine Service, we repaired thither Sunday, January 5.

the

⁽¹⁾ This was also afterwards noticed by another traveller, Mr. Robert Ker Porter, who visited Abo in December 1807. "The church is large, and of brick; built, they tell me, by a Metropolitan, named Henry, who was an Englishman." Travelling Sketches, vol. II. p. 84. Lond. 1809.

^{(2) &}quot;The organ may be ranked amongst the best in Europe: its tones, indeed, equalled any I had ever heard," Ibid.

the second day after our arrival, and found a very crowded CHAP. XI. congregation. Seeing an empty pew on the northern side of the nave, we entered, and took possession of the seats; but we had no sooner done this, than we discovered that we were the objects of universal derision among all who were present. The women tittered; and the men, laughing and whispering to each other, frequently regarded us, without its being possible for us to divine the cause of the amusement we had thus afforded. At last we observed the true reason: we had inadvertently seated ourselves on the female side of the aisle; the women, as in all the northern churches of Europe, being separated from the male part of the congregation; and the two sexes occupying different sides of the building. As soon as we found out what was the matter, we rose from our seats, and joined that part of the assembly which consisted only of men: but the laughter, which had before been subdued, and kept within bounds, now broke forth and became more general than ever, when it was perceived that we were conscious of the mistake we had made.

organist

After the Service ended, we repaired to the organ-loft, Effect of an with a view of conducting thither some of the Finland pea- some Natives sants, whom we had observed expressing their astonishment, which amounted almost to fear, whenever the organ was heard. They were some of the wild race of the Finns of Savolax, who had been attracted by curiosity into the Cathedral. Having conducted them into the organ-gallery, we prevailed upon the organist to allow them to touch the keys with their fingers; but the moment any sounds were produced, they started back and were evidently alarmed.

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CHAP. XI. organist then played a voluntary, and introduced one of their own national airs: the effect it had upon them was singular enough; it changed their apprehensions into immoderate mirth: roaring with laughter, like so many savages, they began to imitate the motions which the organist made with his arms and feet; at the same time, being altogether unable to account for the sounds they heard, as these were varied, so their starting was renewed, being always followed afterwards by laughter, and seizing hold of each other as for protection. The shocks of an electrical apparatus could hardly have produced greater agitation in persons who have not felt their influence, than did the solemn tones of this fine instrument among these simple Finlanders, who had evidently never before heard any thing similar; although by no means utter strangers to all musical sounds, however striking to them the difference between the notes of an organ and their own rude musical instruments, to the sound of which their poetry has been sung for many ages'. This organ, together with many other

^{(1) &}quot;Atqui ut omnes fere antiqui populi, antequam artis scribendi notitiam sibi compararent, Poësin tamen, Musicamque cum ea conjunctam, excoluerunt; ita sua FENNI quoque nostri semper habuerunt carmina, quæ suo idiomate Rumoot adpellavere, neque musicam variis instrumentis adhibitis, tractare neglexerunt: quæ tamen nec fabricam valde artificiosam prodidisse, nec teretibus nostri ævi Musicorum auribus Specimen Historiæ Litterariæ Fennicæ, p. 9. Aboæ, placuisse, facile intelligitur." Typis Frenckellianis.

Acerbi speaks of the antient melody of the Finlanders, called Runa. "It consists of two periods," he says, " or bars of five crotchets each, which make two periods of eight notes." See Acerbi's Travels, vol. I. p. 284. Lond. 1802.

We have figured and described a kind of dulcimer, or lyre, with five strings, in a former Volume (p. 440), which the Finns make use of, and which they call Kendele, or Kentelet. "Nomina ejusmodi instrumentorum Fennis vernacula, nec a vicinis gentibus mutata, hoc demonstrant : e. q. Mandele, nablium, Tortvi," &c. Annot. Specimen Hist. Litt. Fenn. p. 9.

other donations of more importance to the inhabitants of $\mathring{A}bo$, Chap. XI. were the gifts of a Mr. Whitefoot, a native of Lubeck, once a wealthy merchant of this city. His portrait, at full length, in the old *English* dress, is placed in the centre of the organ. Two other pictures also, the heads of himself and his wife, appear, one on either side of the altar. These examples of public munificence do not seem to have met with much gratitude. Another public benefactor to the city died, as it is said, in such extreme poverty in Abo, that the sexton refused to toll the knell for his decease, because no one would engage to pay him for so doing.

We repeated our visit to this Cathedral. There is no Interesting building in all Scandinavia more worth seeing. The best Chorus Tottiview of its beautiful roof is from the altar. On the right hand, in the eastern part of the nave, close to the entrance of the Chancel, is a small sepulchral shrine belonging to the Tott family, called Chorus Tottianus; which contains a monument of such singular interest, that we were surprised to find no mention made of it by any of the travellers who have preceded us in this route. It is nothing less than the tablet erected to the memory of CATHARINE, wife of ERIC XIV., whose remarkable history we shall presently allude to. The mouldering reliques of her once beautiful form lie deposited in a vault below. This shrine, or chapel, is fenced with iron gates: within appears a magnificent marble monument, erected to the memory of Count Achatius Tott, grandson of Catharine, and his second wife Christina Brahe. Their effigies, of the size of life, marvellously well sculptured for the age in which they were executed, are placed upon a cenotaph;

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CHAP. XI. cenotaph; the bodies being in oak coffins covered with tin, in the vault beneath; together with those of Catharine, and Sigrid her daughter by Eric XIV., the mother of Achatius Tott. Owing to their relationship to Eric XIV., the ignorant verger had confounded their history, and shewed the two statues of Count Achatius and Christina as those of Eric and Catharine. There are, moreover, two pictures, whole lengths, of the same persons, placed above the monument, painted in Vandyke's manner. The face of Christina expresses a degree of mildness bordering upon melancholy. She was evidently one of the beauties of her day, rather below the middle stature, with delicate features, fair complexion, and light hair. In her hand she holds a plume of feathers. In viewing these statues and pictures, we seemed to be admitted into the midst of *Eric*'s family; and only wished we could have made them open their mouths, and tell us a little more truth than historians have done concerning this monarch and his family. The marble effigy of Achatius Tott represents him in complete armour: and the two figures of himself and Christina are evidently portraits, from the minute attention to accuracy which the sculptor has shewn in all that relates to their persons and habits. The monument was erected in 1688; and we found one of the four columns belonging to it thus inscribed with the artist's name: "Petrus Schultz, S.R. Sculptor, invenit et fecit." In the figure of Achatius Tott we recognised the genuine costume of the country; a Scandinavian custom of letting the hair grow so as almost to obscure the eyes on the two sides of the face, falling to the shoulders on either side, and lying quite flat upon the top of

Statues and Pictures.

the head. This practice may be observed over all Sweden CHAP.XI. and Finland. There is a regiment of cavalry in the Swedish service, in which this costume is remarkably preserved; the officers and men wearing their hair in two long braids, which hang like pig-tails, one on each side of the face, in front of the ears, fastened, at their extremities, with clasps of lead. This is a national observance, attended to with as much scrupulous devotion, as among the Tchernomorski Cossacks the preservation of a single braided lock of hair, which extends from the crown of the head, and is worn tucked behind the ear. Nothing can be conceived less becoming than the two side-locks of the Swedes; but they give a certain degree of martial fierceness to the countenance, which perhaps may explain the reason why the ancient Britons, and other barbarous tribes, adopted the same practice. Over the cenotaph are placed the armorial ensigns of the two families of Tott and Brahe; and above all appears the image of our Saviour, with the cross, between the figures of two angels1.

But that which possesses a greater degree of interest in this Choir, although a monument of much less splendour, is a plain marble tablet, placed against the wall, which appears upon

⁽¹⁾ This is the Inscription upon the Monument of Achatius Tott: it is in capital gilded letters:—

[&]quot;Illustrissimi Herois ac Domini, D: ni Achatii Tott, Comitis de Carleborg, Liberi Baronis de Sjundeby, Domini in Ekholmsund, Lehals-Lahn, Liuxala, et Gerkenaes, Equitis aurati, Regni Sveciæ Senatoris et Campi-Mareschalli; natalis annus, a reddita salute M.D. XC VIII. dies IV. mensis Junii, locus aula Gerkenaes Nylandiæ fuit Mortalitatemque rursus post vitam, rebus domi atque foris, in aula et bello præclare gestis, Gustavo Magno, Regum exemplari, magna ex parte consecratam, A:o M.DC.XL

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Inscription in memory of Catharine, Widow of Eric XIV.

CHAP. XI. upon the left, to one entering; erected, as was before stated, to the memory of CATHARINE the Wife of Eric XIV. She was the Grandmother of Achatius Tott, by his mother Sigrid's side. It has this Inscription, in capital letters:—

CONDUNTUR

BUSTO HOC CINERES

NATALIBUS, VIRTUTE, FORTUNA QUONDAM INCLYTÆ IMPRIMIS KATHARLNÆ, DOMINÆ DE LIUXALA QUAM ERICUS XIV. SUEC. GOTH. QUE REX, THORI REGII SOCIETATE DIGNAM HABUIT; EADEMQUE POST VIDUITATEM AD ANNUM USQUE ÆTATIS LXIII. SUMMA VITÆ MORUMQUE PIETATE ET INNOCENTIA TRANSACTAM. PLACIDE IN AULA LIUXALA ANNO RESTAURATÆ SALUTIS M DCXII. DEHINC FILLÆ EJUSDEM EX THORO REGIO LEGITIME OBIIT. CONCEPTÆ DOMINE SIGRIDIS, QUÆ CONJUNX PERILLUSTRIS DOMINI HENRICI TOTT, PERMAGNO HEROI ACHATIO TOTT GENITRIX EX-STITIT: QUEM TABULA EX ADVERSO POSITA FUSIUS DEMONSTRAT. ANNO DOMINI M DC LXXVIII.

1LLUSTRISSIMUS R. S. DROTZETUS COMES PETRUS BRAHE, CURAVIT HOC EPITAPHIUM FIERI NOMINE AC SUMPTIBUS ILLUSTRISSIMÆ COMITISSÆ, DOMINÆ CHRISTINÆ BRAHE, NATÆ COMITISSÆ DE WISINGSBORG, COMITISSE DE CARLEBORG, LIB. BARON. DE SJUNDEBY, DOMINÆ DE SKOFTEBY, EKHOLMSUND ET LEHALS LAHN. SIMUL DONAVITHUIC ECCLESIÆ CATHEDRALI ABOENSI MILLE IMPERIALES.

die xv Julii, ætatis ultra quadragesimum biennio in aula sua Lafwila Parochiæ Euraminne exuit. Facta non vicini solum, et quos arma Patriæ attigere stupent, sed Italus pariter et Iberus atque Galli loquntur. Ita post annorum a prima ætate complurium militiam in insigni Comitis Jacobi de la Gardie, Regni Marschi per Moscoviam expeditione incepta, et inde Regis contra Polonum in Borussia auspiciis continuatam, ac denique interjecta in castra exterorum peregre transcursione etiam sub Augusto Bello Sveco-Germanico probatam, dignus, cui primarium in militia Campi-Mareschalli munus,

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By this inscription, which really becomes a curious historical CHAP. XI. document, we learn some particulars respecting Catharine, Historical of which history is silent;—That after the imprisonment of concerning her husband, and probably after his death, she withdrew, far able woman. from the Swedish Court, to the tranguil solitudes of Finland, where she lived in unmolested retirement, and died after attaining an advanced age; -That her daughter Sigrid, whom she had borne to Eric XIV., married Henry Tott, from which union descended Count Achatius Tott, whose monument we have described. Liuxala, mentioned as the place of her residence and death, is a large farm or manorial scat in the parish of Kangasala, in Tavasthus, where the remains of the house may still be seen in which Catharine ended her days: it was built by Count Tott, who was Governor of that province.

A vault below this Choir, contains, as before mentioned, the simple coffin which enshrines the mouldering reliques of that once beautiful female whom Eric XIV. so passionately loved. The ceremony of her marriage to the king took place upon the sixth day of July 1568, the year after his cruel

ct cum exercitu delecto agendi plena daretur potestas, quam in Saxonia inferiori exerceret, a Maximo Rege habitus, in Pomeraniæ Ducatibus, Gryphisvalda, Wismaria, et Rostochio, in Bremensi, Stada, et Boxtahuda, locis munitissimis occupatis, exercitum Cæsareum eis partibus penitus profligavit. Hæc inter Equitis aurati splendor ipsi a summo virtutum æstimatore tributus, hinc Senatoria in victrici Regno dignitas, et post fata quoque Comitatus honos additus. Genus ipsi Paternum ex familia Sveciæ Daniæque a multis retro sæculis multo celeberrima, Regibusque cognata. Materno pariter Filia ERICI XIV. Regis Sveciæ legitima, Genetrice clarus. Bis maritus; primas cum illustrissima Domina Sigride Bjelke, contraxit nuptias, atque ex ea filii, Comitis Claudii Tott, virtutibus, qua toga, qua sago inclyti parens; secundis, illustrissimæ Dominæ, D: næ Christinæ Brahe, Comitissæ de Wisingsborg &c. sese junxit, quæ superstes hoc manibus piissimis vovit monumentum."

CHAP. XI. cruel murder of the whole family of the Stures; and that of her coronation, which was celebrated with the utmost pomp, followed the day afterwards: and from the inscription upon her memorial tablet, we learn that her death did not happen until forty-four years after her coronation: but the first part of this interval was to her a period of tempestuous trouble, for the very year of her coronation was that of her husband's Beside her remains, there are also here. dethronement. preserved in coffins of brass, oak, and wood faced with tin, the remains of other members of the Tott Family, with Swedish inscriptions; which, however, are so nearly English, that any English reader, accustomed to Scottish-English, or Old English, might, understand their meaning. example, we shall give the legend which appears in capital letters upon the coffin of Sigrid, king Eric the Fourteenth's daughter, by Catharine, who also lies buried here. The coffin is of wood, faced with tin-plate.

> SIGRID. KONUNG ERIC DEN FJORTONDES DOTTER, FRU TIL LJUXALA, SJUNDEBY OCH GERCKENÅES. BLEF FÖDD ANNO MDLIV OCH ASSOMNADE I HERRANOM PÅ LJUXALA GÅRD DEN XXIV APRILIS ANNO MDCXXXIII.

Manuscripts preserved in a brazen coffer.

We had some hope of discovering other historical information connected with the state of Sweden during the period of Eric's sufferings after his deposition, upon being permitted to examine the contents of a brazen chest which was shewn to us, within a wooden covering, and which contains several manuscripts written upon parchment. They consisted, however.

however, of documents which perhaps will only interest the CHAP XI. Swedish antiquaries. We shall briefly notice them in the order of their dates.—The first is an Epicedium upon the funeral of Catharine, wife of Eric XIV, in 1612. The second, an Epicedium upon the re-interment of her daughter Sigrid, written in 1635, when her body was removed from the church of Råndåmåkensi to the Cathedral at Åbo. The third is an Epithalamium, in the German language, upon the marriage of Achatius Tott with Christina Brahe, the seventh of October, 1638. The fourth gives an account of the heroic deeds of Achatius Tott; and the solemnities observed at his funeral, September 29, 1640. The fifth is the patent of nobility granted to his son Claudius Tott, by Queen Christina, March 20, 1652. The sixth, with thirteen signets annexed to it, dated Ekholmsund, November 6, 1639, is nothing less than the dowry granted by Achatius Tott to his second wife, Christina Brahe.

that we did, in ransacking the chambers of the dead for historical information connected with the history of such a gloomy superstitious tyrant as Eric XIV.; for whose bad character some writers seem anxious to apologize, by pointing out a few brilliant points that appeared amidst its dark shades; and also by maintaining, that the charges brought against him were calumnies invented to justify the conduct

Few persons perhaps would have bestowed the same pains Histories of Erw's reign

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of his brothers, by whom he was dethroned and imprisoned.

^{(1) &}quot;Il y a néanmoins beaucoup d'Ecrivains qui font passer ces accusations pour des calomnies. Ils prétendent qu'elles ont été en partie inventées pour justifier la conduite

CHAP. XI. It is just possible that his faults were extenuated by those writers who lived under his successors; and perhaps crimes were attributed to him of which he was never guilty: as, in the history of our English Kings, we find a remarkable instance in the odium cast upon the character of Richard the Third, by the historians who endeavoured, by their calumnies, to gratify his mean successor, Henry the Seventh', and the members of that family. But, in viewing the annals of Eric's reign, a sensation of indignant regret is always excited, when we read the story of those deeds of blood by which the whole race of the Stures were exterminated. It is impossible to exculpate Eric: because one of these innocent victims was immolated. and in the most cowardly manner, by his own hand. his

des Ducs ses frères, et en partie répandues par les parens de Joran Peerson, afin de rejetter sur la personne du Roi les crimes de ce Ministre."

Hist. de Suède, par Puffendorf, tome II. p. 3. Amst. 1843.

⁽¹⁾ Shakspeare has not exempted himself from the list of these: and many of our erroneous notions of Richard the Third's character are owing to prejudices founded on the calumnies with which our great poet sought to gratify Henry the Seventh's granddaughter, Elizabeth. Setting aside all the arguments adduced by Buck, whom Rapin charges with partiality, there is one observation concerning Richard the Third, which has escaped Bacon, in the beginning of his Life of Henry the Seventh; speaking, as it were, volumes:-" Quanquam autem Princeps fuisset in militari virtute probatus, atque honoris Anglici assertor strenuus, legislator item bonus, in levamen et solatium vulgi." Vid. Histor. Regni Regis Henrici Sept. vol. V. p. 6. Amst. 1662. And with regard to the contrast exhibited in Richard's successor, how admirably is it displayed by Rapin's delineation of the Royal Miser; the very personification of Avarice—tall, lank, with a long and thin face lean like the rest of his body, and a countenance exciting fear and distrust.

⁽²⁾ See the account of his vile stratagems for the extermination of the noble family of the STURES; one of whom, Nils Sture, he stabbed with a poignard, when rising from his bed in prison; who drawing the weapon from the wound, kissed it, and presented it to his murderer:—and all the rest were cruelly massacred. "Carcerem invadens Nicolai Sture, in lecto jacentem, et sibi reverenter assurgentem, proprio sauciavit pugione.

his character, Eric XIV. seems most to have resembled Paul CHAP. XI. of Russia—a wretched compound of superstition, perfidy, lust, and cruelty; and, with all these vices, occasionally irritated by flights of insanity. But the story of Eric's career has never been either fully or fairly told: and it is rather remarkable, that our knowledge should be so imperfect of the life of a sovereign Prince, the wooer at once both of Queen Elizabeth and of Mary Queen of Scots'. Puffendorf has collected very little upon the subject; and the more original sources, to which we have referred, do not supply the deficiency. At least a dozen romances might be written upon the subjects of Eric's amorous adventures. His amours with Catharine, when related with a due attention to truth, have all the air of a romance. She was the daughter of a peasant of Medelpad, and gained a livelihood, when a child, by selling nuts in the market at Stockholm⁶. Here Eric first saw her:

Quem Nicolaus ex gravi pectoris vulnere protinùs extractum, et osculo humiliter tactum, pàrcussori obtulit, indeque furens Princeps nonnihil mitigatus abiit." Chronol. Scond. apud Messenium, tom. VI. p. 44. Stockholm, 1700.

- (3) "Non diffiteor regem Ericum quandoque parum sani fuisse cerebri; sed istud per intervalla delirium quidam alii, velut hæreditariam à matre, simili mentis vitio nonnunquam laborante, contractam reputant labeculam." Ibid. p. 36.
- (4) There is a History of ERIC XIV. by Olaf Celsius; and the works of Loccenius and Messenius may be referred to: but the accounts of the Swedish history, at this period, are, for the most part, jejune.
- .(5) Puffendorf ascribes the chief part of Eric's bad conduct to the evil counsels of one Peerson, his favourite. His secretary, Helsing, endeavouring to put himself upon his guard against following Peerson's advice, was stabbed by the king with his own hand.—Hist. de Suède, tome I. p. 438. Amst. 1743.
- (6) "Erat Catharina humili admodum genere propagata, utpotè filia cujusdam Magni, agricolis nati parentibus, in Medelpadia, qui decurionis nactus officium, inter præsidiarios castri

CHAP. XI. her; and, being struck by her beauty, had her brought to the palace; where she was taken into the service, and brought up under the auspices, of his sister, the Princess Elizabeth. As she grew up, he fell so desperately in love with her, that she was suspected, by the people of that age, of having given to him a love-potion. After his deposition, little is known either of her or of his history, except that his own sufferings were in some degree proportioned to his enormous offences. Among the different dungeons in which he was confined, he was for some time incarcerated in Abo-hus, a fortress at the mouth of the river upon which Abo is situate3: and there is a record of her death and burial at Abo, A.D. 1612, in the valuable works of Messenius'; the only allusion, perhaps, made

> castri Stocholmensis milites, eò migravit, ubi filia tenuem parentum sustentationem quopiam simul lucello alleviatura, in foro nuces escario habuit venales."—Chronol. Scond apud Messenium, tom. VI. p. 36. Stockh. 1700.

- (1) "In Gynecæo deinceps principis Elizabethæ liberaliter profecto educabatur." Ibid.
- (2) "Quamquam nonnulli existiment, quodam regem Ericum philtro a Catharino propinato, imprimis usque amantem ipsius evasisse, et posteà redditum indè amentem."
- (3) "The castle, in the language of the country called Abo-hûs, is situated at the north of the river Aura, upon a cape bounded on three sides by the water. This is one of the most antient fortresses of the land. It was well fortified under the kings Albrecht, Charles VIII., Knutson, and Gustavus Vasa. Besides four towers, which were destined to oppose the approach of an enemy to the harbour, it had on the south side a high wall, with a triple rampart of earth, and a double ditch. A new building has been added to the old-structure, but in a different style of masonry. Abo-hûs was the residence of Duke John, and the prison of Eric XIV. in the sixteenth century." --Acerbi's Travels, vol. I. p. 214. Lond. 1802.
- (4) "MDCXII. Catharina, regis Erici vidua, hoc tempore clausit vitæ periodum, ABOGIR sepulta."-Epitome Chronol. Scond. apud Messen. ed. Peringskiöld, tom. XV. p. 156. Stockholm, 1703.

made to her in history, after her husband's dethronement, CHAP. XI. which happened forty-four years before, on the 28th of September 1568.

In a room adjoining the Sacristy are huddled together all the images and symbols of superstitious mummery, which belonged to the Cathedral when it was a place of Roman-Catholic worship; -- doubtless, therefore, before the wholelength portraits of Luther and Melanethon adorned this Portraits of building, which are now seen in the principal aisle. That Melanethonof Luther has this inscription:

DOCTOR MARTINUS LUTHERUS VIVIT.

PESTIS ERAM VIVUS

MORIENS ERO MOKS

TUA PAPA.

1684.

Upon that of Melancthon are these words:

MAGISTER PHILIPPUS MELANCTION.

ROM. VIII. 31.—SI DEUS PRO NOBIS, QUIS CONTRA NOS? ANNO 1684.

Over one of the doors is a gilded wooden image of St. Image of Henry the Martyr; which the reforming Iconoclasts have Martyr. suffered to remain in its original position, as being the effigy of the Patron Saint of Finland, the first preacher of the Gospel in this country. In former times, such was the reverence entertained with respect to this image, that it was only exhibited upon days of public festivity. The old shrine which inclosed it still remains, together with the doors once VOL. VI. 3 H

folded

CHAP. XI. folded over it. Many things within this venerable pile serve to call to mind the desolating hand of war, which has so often ravaged this part of Finland. From its very situation, Abo will always be liable to commotion, so long as the possession of the rich corn territories, the forests, and lakes of Finland, may invite a struggle between the contending interests of Sweden and Russia. Accordingly, the memorials of those warriors who have fallen in these struggles are the first things to strike a spectator in his visit to the Cathedral. Swords, with crape-covered handles, are seen from the walls; and many a long -c er gend, upon the tombs by which he is surrounded, speal

> — "Tales of iron wars: Of sallies and retires; of trenches, tents, Of palisadoes, frontiers, parapets; Of basilisks, of cannon, culverin; Of prisoners' ransom, and of soldiers slain, And all the currents of a heady fight."

It would far exceed the limits of a traveller's journal to notice all the other monuments in this Cathedral, and to copy their inscriptions. Some of them, however, are well worthy of notice; especially one of black marble, representing, upon a triclinium, the sculptured cumbent effigies of a warrior and his wife'. The most antient monument in the Cathedral is the Sepulchral Chapel, erected, as the inscription tells, by OLAUS,

Chapel of Olaus, Bishop uf Abo.

OLAUS, a Bishop of Abo, in 1425; who lies buried here with CHAP. XI. the members of his family. This is the inscription:—

Anmo D: ni mederev Magnus Diai e: pus fecit sieri h. opus HELP MANIA.

The account of his death is also preserved in the following inscription, upon a brass plate:

ANNO COMINI M.CCCC.LII. DIE IX. MENSIS MARTII OBIIT

REFUEREND" IN CHRISTO PATER ET DOMINUS, D: NUS MAGNUS

EPISCOPUS ABOENSIS, HUJUS CAPELLÆ FUNDATOR,

QUI SEDIT ANNOS QUADRAGINTA.

Ther on the same place, follows:

ANNO DOMINI M.C.D IX. DIE VXIV. MENSIS FEBR. OBIIT

RI GRENDUS IN CARISTO PATTI A DOMINUS OLAVUS, D. G.

EPISCOPUS ABOENSIS.

ORATE PRO ISTIS ET CETERIS CHRISTI FIDELIBUS, UT REQUIEM HABEANT CUM BEATIS.

All these had the addition Tavast to their names, as a surname, the first being called Magnus Olaus Tavast; and the sec. id, Olaus Henricus Tavast, who is mentioned in the Chronicle of Juustenius as having instituted an altar and mass in the Cathedrai of $\mathring{A}b$, in honour c be Eleven Thousand Virgins. We were also shewn an inscription commemorating a warrior of the same family, by the name simply of Olaus Tavast, who was also buried here:

ANNO DOMINI M.CCCC.LXI. CRASTINO F: I PETRI DE CATHEDRA NOBIL. VIR OLAVUS TAVAST, MILES HOC OBIIT: ORATE PRO EO.

And

⁽²⁾ This Inscription is no longer in the Cathedral. A copy of it was given to me by Professor *Porthan*.

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Monument of & Scutch Officer.

CHAP XI. And formerly were seen here the marble effigy and cenotaph of Samuel Cockburne, a Scotch officer in the Swedish service, who fought under Charles the Ninth and Gustavus Adolphus; the latter of whom honoured the funeral of this brave officer with his royal presence, being at that time in Finland. The place of this effigy was pointed out to us, as being now concealed by another tomb. The inscription however remains.

> D. SAMUELI COCKBURNO SCOTO, DUCI FORTISSIMO, DUORUM EXERCITUUM CHILIARCHÆ PRÆSTANTISSIMO, TOTIUSQUE SVECICI EXERCITUS SUMMO MAJORI, QUI POSTQUAM MUSARUM CASTRA CUM LAUDE SECUTUS ESSET, IN BELLO SUB AUGUSTISSIMIS CAROLO ET GUSTAVO ADOLPHO SVEC. GOTH. VANDAL. REGIBUS FŒLICITER VIXIT ANNOS XXIII. ET PIE IN PACE MORTUUS FST ANN. ÆTATIS SUÆ

> XLVII, CHRISTI MDCXXI. JOAN. FRATER MŒRENS POSUIT. "COCKBURNE VIXTI FORTIS, AST OBIS FERUS, MARTEM MINERVAM TECUM QUI CONDIS UNO IN SEPULCHRO, QUO NON SCOTI TRISTIUS, SVECI AUT VIDEBUNT, NEC POLONI LÆTIUS."

> We have now noticed whatever appeared to us to be the most remarkable objects of curiosity in this building. There are, it is true, various other sepulchres of bishops and warriors, the former saints and heroes of the country; men famous in their generations: but their names hardly now remain to swell the catalogue of the verger or sexton who conducts strangers visiting the structure. One thing more remains to be described. At the western extremity of the Cathedral, and within its walls, is the Library of the University; to which our attention will now be entirely directed. An account of it, written by Professor Porthan, was printed at Abo, in the form and manner we have before mentioned,

University Library.

as adopted by him for the publication of his works. The CHAP XI. collection is contained in three rooms, and the books are in excellent order.

The establishment of this Library dates nearly with the foundation of the University*, in 1640, under the minority of Christina, daughter of Gustavus Adolphus, who succeeded to the throne of Sweden at the age of six years, upon the death of her father at the battle of Lutzen's. The whole collection of books amounts to 10,000 volumes, and the annual revenue of the Library does not exceed 120 rix-dollars. There are few things in this Library of any general importance:

but

- (1) "Historia Bibliothecæ R. Academiæ Aboënsis, disputationibus publicis XXIII. A. 1771-1787. proposita, ab Henrico Gabriele Porthan, Eloqu. Prof. R. & O. Aboæ, Typis Frenckellianis." This work the author has also deposited in the University Library at Cambridge.
- (2) Many writers, and, among others, the authors of the Voyage de Deux Français, have mentioned that the Library and University were founded at the same time: but this is not strictly true. "Conditâ hic An. Dn. 1640. felicibus auspiciis, favore Reginæ, Litterarum amantissimæ, &c. celebri Christinæá Achdemià (confer. ut cæteros multos taceam, Wexionii Natales Academiæ Aboensis, et Bilmark, Hist. Acad. Aboensis 1. c. § 3.) mox desiderabatur, Musis recens huc translatis, voluptatem, usum, supperasque præbi tura Bibliotheca bene instructa;" &c. observes Professor Porthan; but he afterwards adds, "Tradunt viri de Historia Patriæ summis meritis clarissimi, Reginam idcirco statim post conditam Academiam, Bibliothecam quoque hic fundasse regalique mactasse munificentia: sed hæc verba stricte nimis non sunt interpretanda; nihil enim primis sex amis nova Academia accepit, liberalitate Regia, librorum," &c. Vide Hist. Biblioth Acad. &c. p. 10.
- (3) Upon the 26th of November, 1632. Puffendorf suspected that this great and good king was assassinated by François Albert, Duke of Saxe-Lauwenbourg; an opinion warmly contested by his French Editor (see tom. II. p. 259, Note (1), Amst. 1743). The words of Puffendorf are: " On parle fort diversement de la manière dont il fu, tué. Cependant, par les circonstances on peut juger avec beaucoup de vraisemblance, que dans la confusion le même Duc de Saxe-Lauwenbourg lui donna le coup par derrière."

Details but when we consider the situation in which they are placed, we cannot pass by the notice of those Codices which the Åbo Professors regard as its most valuable ornaments; especially as the increasing power and obvious views of such dangerous neighbours as the Russians render it very doubtful whether any traces of them may long remain. A Catalogue raisonné of the Manuscripts will be found in Professor Porthan's History of this Library. We shall of course notice only the most remarkable.

Manuscripts.

- 1. The first is a Greek MS., in folio, of Actius, a Greek physician.—It is fairly written upon paper; and contains the 8th, 9th, 10th, 11th, 12th, and 13th books of this author; of whose writings only the eighth, and some chapters of the ninth book, have hitherto been published in the original Greek.
- 2. A MS. of Seneca, elegantly written upon vellum, in the beginning of the fifteenth century.
- 3. A folio MS. of Cicero de Oratore, elegantly but inaccurately written upon paper, at Bologna, in the year 1451.
- 4. A folio MS. of Cicero's Orations, negligently written upon vellum.
- 5. A folio MS. upon vellum, elegantly written, of *Petrarch* and *Boccace*'s Lives of Illustrious Men and Women.
 - 6. A fine folio MS., upon vellum, of *Justinian*, with copious

⁽¹⁾ See Hist. Biblioth. Acad. Aboënsis, as before cited.

⁽²⁾ ΑΕΤΙΟΥ 'Αντιοχίως ίπτρου πιρὶ διαγνωσίως καὶ θιραπτίας τῶν νοσημάτων, λόγοι έξ, είσοτε νῦν μή ποτε ἐκτετυπώμενοι.

copious marginal annotations, beautifully written, and in CHAP. XI. high preservation.

7. Peter Olaus, his Chronicle of the Kings of Sweden, a folio MS., fairly written, upon paper, in the Swedish language.

There are, in all, eighty-six volumes of Manuscripts: but the list includes Missals, Bibles, Koráns, and a few other Oriental Manuscripts, together with many curious Codices which relate to Swedish and Russian history. There is also a Map of Japan. given to the Library by Count Alric Scheffer, which Porthan calls "rarum Bibliothecæ nostræ cimelium"." The authors of the Voyage de Deux Français, by whom none of these Codices were noticed, mention only one manuscript, in their short account of this Library: and although we give them full credit for their statement, it so happened that we did not see the work to which they allude'.

Among the Typographical Rarities, we saw only the fol-Typographilowing as worthy of the smallest notice:

- 1. Terentius. Argent. 1496. folio, cum fig.
- 2. Cicero, Quæst. Tuscul. cum comment. Phil. Beroaldi. Venet. fol. 1409.
- 3. Horatii Flacci Opera, cum annotat. imaginibusque. Argent. fol. 1498.

4. Persius.

⁽³⁾ Hist. Biblioth. p. 214.

^{(4)&}quot; On nous y a montré un Manuscrit in folio, de 1341 pages; intitulé: Proces-verbal d'une commission nommée in 1676, et sentences qui ont été prononcées sur des maléfices et des magiciennes, écrit en Suédois, de la main d'André Engman, notaire de la dite commission: il manque quelques feuilles au commencement."—Voyage de Deux Français, dans le Nord de l'Europe. Tome II. p. 510. à Paris, 1796.

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- 4. Persius. Venet. fol. 1495.
- 5. Juvenalis Satyræ. Venet. fol. 1494.
- 6. Seneca. Venet. fol. 1492.
- 7. M. Fabii Quintiliani Orat. Institut. Libri XII. sine anno et loco editionis. Fol. Literæ initiales adpictæ sunt et quædam auro ornatæ.
- 8. Julii Firmici Astronomicorum Libri XIII. &c. Venet. fol. in ædibus Aldi, 1499.
 - 9. Boethius. Colon. fol. 1482.
 - 10. Plotinus. Florent. fol. 1402.
 - 11. Dialogus Creaturarum Moralizatus, 4to.
- 12. Missale Obense. Lubeck, 1588, with wood-cuts. Of this work only two copies are extant. The other is at Upsala, and is not perfect.

Besides these, there are some curious Latin Bibles, printed in the fifteenth century; and many others with dates prior to the year 1500. Among them we observed a copy of Æsop,

in

(1) The first work printed in Sweden. They shew another copy of it at Upsala, as we before noticed. Concerning this volume, Professor Porthan, in his History of the Library, remarks: "Quoniam læsum est hoc exemplum (figuris rudissimis, coloribus etiam allinitis, ornare opus edifor voluit), et ultima imprimis folia desunt, non possumus certo quidem hactenus definire, (quod alias editiones cum hac comparandi non fuit potestas,) utrum editio sit Stockholmensis a Joh. Snell impressa, an ea antiquior Coloniensis a. 1481, industria et impensis Conradi de Hombroch e prelo emissa: sed pro Stockholmensi tamen potius habendam putamus." At the end of the volume, however, we found this manuscript note: "In pagina ultima hæc leguntur verba. Præs. (Præsens) liber. Dialogus Creaturarum appellatus jocundis fabulis plenus; impressus per Johannem Snell, artis impressoriæ magistrum—in Stockholm inceptus, et munere Dei finitus est. Anno Domini 1.4.8.3. Mensis Decembris."

[•] Hist, Biblioth, p. 226. Note (d).

in large octavo, with the date 1490; but no mention made CHAP. XI. of the place where it was printed. We saw also some curious old books of Travels to the Holy Land and other. Eastern Countries, from the Venetian Press, dated 1518, and 1519, and in the Italian language. This Library is well stocked with good editions of the Greek and Latin Classics, with the Writings of the Father, books of Jurisprudence, books of Natural History (including the famous Danish work on Shells, the Flora Danica, and most of our best Writers upon this subject), Medicine, the Mathematics, Geography, History, Antiquities, Voyages, and Books of Travels, &c.&c. A few other English Authors caught our attention, as almost tempting us to inquire by what accident they came there. Among them we saw Bacon's History of Henry VII.; Camden's Queen. Elizabeth; Rapin's History of England; Carrington's Life and Death of Oliver Cromwell; History of Charles the Second, by a person of quality; Wallace's Account of the Orkney Isles; Martin's Western Islands of Scotland; &c. &c. A volume of Sacred Songs, prepared for the use of the Churches in Lapland, and printed in the Swedish language, in octavo, at Stockholm, in 1619, will shew, by its title, how very nearly allied the languages are of *England* and *Sweden*, in many instances. It was called, "En liten Sångebok"—a little Song Book. With these few observations, perhaps, the Reader will have as much information as he may wish to possess, respecting the Public Library of this University: but if he should be anxious for more, it may be afforded him, by reference to a quarto volume, written upon this subject alone, by the celebrated VOL. VI. 3 I

CHAP. XI. celebrated Professor who so kindly assisted us in our own researches1.

Public Edificos.

Theatrum Anutomicum.

Auditory of

Disputations.

Prof. Gadolin.

• The principal public edifices of the University are most curiously made a part of the Cathedral; being situate within its walls. Besides the Library now described, pursuing the same wall, we came to the Anatomical Schools (Theatrum the Disputations are held. It was intended that, in the

Anatomicum), and the Public Auditory, or Chamber, in which ensuing spring, a handsome building should be erected, for the purpose of containing the Library, and all other Collections belonging to the University. A plan for the form of this new structure was shewn to us: it was to consist of a front with two wings, disposed according to the three sides of a parallelogram, in this manner:



in the side wings were to be Public Lecture rooms, and Repositories for Cabinets of Natural History, &c.

Being afterwards introduced to the celebrated Professor of Chemistry, John Gadolin, he had the kindness to shew to us the collection of *Minerals* belonging to the University. We have before mentioned the neglect visible in other national collections of mineralogy belonging to Sweden; and

there

⁽¹⁾ See Professor Porthan's Work, as before cited.

there is nothing in this to exempt it from the remarks we CHAP.XI. then made. The Professor who has the care of it, a man of Collection of great and renowned talents, has done all he could for its improvement; but it is, after all, a wretched heap of trash. The most remarkable specimens which we saw in this collection, were, a mass of the famous Siberian Iron, supposed to be meteoric, discovered by Pallas near the banks of the river Jenisei; and some fine examples of the curious mineral which bears Professor Gadolin's own name, and in which he discovered the remarkable substance called Yttria. Some specimens of the Gadolinite were said by him to contain as much as forty per cent. of Yttria. Perhaps there may have been, in this collection, other minerals worth notice; but the quantity of useless lumber with which we found it encumbered, and the want of a proper arrangement, prevented our further examination of its contents.

The collection of Botany, under the care and superintendence of Professor Hellenius, was very differently charac- Professor Hellenius. terized. It is by far the most perfect thing of its kind in Sweden, not excepting that at Upsala, both with regard to the rarity and number of the plants, and the beautiful and lucid order in which they are kept and arranged. In looking over the Catalogue, we were surprised to find an addition made to every genus; containing, in some instances, twenty or thirty non-descript plants, hitherto undetermined, and therefore

⁽²⁾ Professor Gadolin, at this time, estimated the proportion of Yttria as equal to two-fifths of the mass; but, according to Ekeberg's analysis of Gadolinite, some varieties of it contains 55.5 of Yttria, besides 4.5 of Glucina.

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CHAP. XI. therefore anonymous. The Professor himself conducted us Botanic Gar- to the Botanic Garden, which we found to be small, but in the highest state of cultivation. In the green-houses, we saw some plants from the Cape of Good Hope, which were in flower, and as healthy as if they had been growing in their proper soil. A visit to this garden is sufficient to shew the lovers of botany what may be accomplished by economy and talents. The annual fund for its support did not exceed thirty pounds of our money; but in its produce, and in all things necessary for the advancement of botanical studies, especially in the genius and abilities of its Professor, Abo. little as it is known in the world at large, may vie with the most celebrated Universities. One circumstance, mentioned to us by the Professor, seemed very unaccountable; namely, the difficulty of rearing the Lapland plants. Very few plants brought from that country will flourish here; and yet the climate and soil seem nearly allied to those of the Arctic regions. It is further remarkable, that with the Siberian plants they have no difficulty whatsoever. England, we experienced the difficulty of rearing plants from seeds collected in Lapland; but the great difference of climate and soil may explain the cause'.

After

⁽¹⁾ All the attempts made to rear the different species of Lapland Pedicularis, in the Botanic Garden at Cambridge, were without success. The seed of the Pedicularis Sceptrum Carolinum, which we collected in a mature state, and forwarded, for greater expedition, in letters to England, did not afterwards germinate. Yet we have seen this majestic plant, in the north of Sweden, bearing its exuberant blossoms, and flourishing, to the height of four feet and a half, in meadows far south of the Arctic Circle. In Norway, it never attains this altitude: it is there always in such a dwarfish state, as to make it appear like a different species.

After this visit to the Botanic Garden, Professor Hellenius CHAP, XI. shewed to us his Library, and private collection of Natural Hellensus's History. His ornithological cabinet afforded us a very gra
private Collections. tifying sight, as it contained all the rarer birds of Scandinavia, in excellent preservation; and among these especially, the birds of Lapland, which are not common even in that country. The Turdus Roseus is of this number; it might be called the red-breasted Blackbird. The Swedish naturalists consider it as an American bird, which only occasionally visits Lapland and Finmark. The Corvus Lapponicus, resembling a small Magpie, is also a rare bird. There is an account of it by Thunberg, in the Transactions of the Academy of Stock-Another very remarkable bird is the Scolopax Glottis, or great dark-coloured Woodcock, with a very long beak, the lower half of which is red: also the Fringilla Lapponica: and, beyond every other in the beauty of its plumage and sweetness and infinite variety of its notes, the Motacilla Succica, called Hundred-tuner, or Saddan Kiellinen, by the Lapps, which is seen perching on the Betula nana, and making its nest. among the moss, where it deposits five or six eggs of a greenish hue. Its brilliant plumage bids defiance to the pencil of the artist. We preserved one of them; which, for this reason, we have not figured in this work, being dissatisfied with the drawings made of it. Its feathers are of a lively Turquoise blue colour, bordered about the throat with black, which passes into a reddish grey. It feeds upon caterpillars, and other small insects and worms. There are above an hundred different species of birds tound in the neighbourhood of Abo, and in the Aland Isles. Many of these.

CHAP. XI. these, of course, are sea-fowl. They have four different kinds of Gulls, together with the Colymbus and the Pelican, the Eider-duck, and twelve or fourteen other species of Anas. In our frequent conversations with Hellenius,—and we saw him daily during the time of our short residence in Abo,—we knew not which to admire most; his polished and friendly manners, open, generous, and hospitable; or the extent and variety of his mental accomplishments, which made us consider him as one of the best-informed scholars of his country. Indeed, we saw enough in this University to be convinced that Upsala, although more celebrated, could not justly be compared with it. But the opinion which foreigners entertain of the merits of the Swedish Universities, is generally formed from conversing with the Swedes in Stockholm, where Abo is almost as little known as it is in London. Consequently, if in the literary circles of Stockholm any mention is made of Abo, the Swedes fancy that you are unmindful of the superior advantages of Upsala, whose pride and high-mindedness *carries all before it; yet this boasted superiority exists only in prejudice and imagination: in point of real science, Abo is as much superior to Upsala, as the latter is before the Univer-But if this declaration were made among the sity of Lund. Swedes of the metropolis, it would give rise to considerable opposition and warmth of debate; because, in Stockholm, the same notions are entertained with regard to the Finland University, that Englishmen entertain respecting the Universities of Dublin and Edinburgh, when compared with Cambridge and Oxford: they will not suffer them to be weighed together in the same scale. Travellers, however, viewing

with

Comparative cutinuite of the two Universities. Upsula and Abo.

with impartial eyes their comparative merits, soon learn CHAP, XI. to disregard local prejudices. Judging of the tree by its fruits, they will render to merit the just tribute which is due to merit: and in so doing, it must be confessed that, at this time, Abo had the superiority. At Upsala, science was made a matter of conversation; at $\mathring{A}bo$, it was a subject of real and industrious research: but Upsala possessed the means of giving notoriety and celebrity to any the most trivial contribution which it made to the interests of science; whereas the facilities of common communication with the literary world were wholly denied to \mathring{Abo} . The former, it is true, boasted the names of Thunberg', and of the two brothers Afzeliuse; to which has since been added that of an illustrious chemist, in Berzelius: but Abo was at this time honoured by its historian Porthan, by its poet Frantzen, by its chemist Gadolin, and by its botanist Hellenius; men who in any University would have made a distinguished figure, and would have been regarded among its brightest ornaments. The different state of public morals, too, was strikingly conspicuous in the two Universities of Upsala and Abo. Upsala, drunkenness and riot pervadedher streets; and licentiousness and Jacobinism had found their way into her cellars, which were nightly the resort, and indeed the only public place of meeting, for her students. In Abo, although a town of greater magnitude, containing a more numerous population,

⁽¹⁾ Author of Travels in Japan, &c. &c.; successor of Linnœus.

⁽²⁾ John Afzelius, Professor of Chemistry; and his brother, Adam Afzelius, celebrated for his foreign travels and talents in Natural History, especally in Botany.

CHAP. XI.

population, peace and decent order everywhere prevailed. We saw no symptoms of that looseness of discipline and contempt of decorum which are so common in Upsala. Among its inhabitants, a milder disposition seemed to prevail; chiefly, perhaps, owing to the absence of those French principles, which had been disseminated with fatal success, to poison and debase the minds both of Students and Professors in Upsala, as among persons of all ages in Stockholm. In Abo, the older Swedish manners and customs were prevalent, not having been yet liable to such mischievous innovations: a love of truth, and a sincere ardour in the pursuit of science, seemed to be the natural growth of the place, where the force of good example was added to precept. Upsala, among the youth of the country, might be deemed, as doubtless it was, the most fashionable seminary of education; but a parent, who had the opportunities of information and choice respecting both, would not long hesitate in which to place his son. Not, however, that there is any thing of austerity in the manners of the inhabitants. The principal of them are merchants, living in a very elegant style. One of them, to whom we were introduced, a Mr. Bremer, had travelled over Europe, and visited our own country. This gentleman possessed an excellent library; and had, moreover, a small but good collection of pictures and engravings. While, in the depth of their severe winter, the novel sight was presented to English travellers, of sledges attended by whole tribes of the wildest Finlanders from the interior of the country, now flocking into ${Abo}$, and passing and repassing amidst houses and public buildings half buried in snow, we had invitations to balls

and

and routs, in which a very striking contrast was exhibited to char.xl. such features of savage life. Judging from the appearance exhibited in the public streets, we might have imagined ourselves in some town of North America; but in the evening, visiting their musical societies, of which they have two regularly established in this city, or joining in their dancing parties, we were rather reminded of what we had seen in the capital.

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Finlander of Savolus in the Streets of Abo, with his Stedge.

CHAP. XII.

Concourse of the Natives from the neighbouring Districts—Manners of the Finns—their motives in visiting Abo—their dress—marvellous expedition which they undertake—anecdote of one of them—Streets of Åbo—Booksellers—Price of articles—Language and People of Finland—Finnish Poetry—Merchants of Åbo—Maritime Commerce of Sweden and Norway—Singular customs—Courts of Judicature—Distant excursions of the trading Finlanders—Foundation of the University—Number of its Students and Professors—Importance of a travelling-carriage—State of the accommodations for Travellers—Cursory reflections previously to the departure for Russia.

CHAP. XII.
Concourse of the Natives from the neighbouring districts.

We arrived in that season of the year which, of all other is best suited to gratify a stranger's curiosity; when the rigorous frost of the winter enables the natives of all the neighbouring districts to resort to Åbo for merchandize. It wanted only a fortnight to the annual fair; but the inhabitants of



all the Finland, and even the more distant Lapland provinces, CHAP. XIL. began to pour in, with increasing numbers, every day. length, the coming of these visitants constituted every morning a new throng, moving in regular procession through the streets. By this means, without the pains and privations that would attend a journey into the interior, we were enabled, leisurely, to see and converse with people from very remote regions; to watch their mode of life, wants, luxuries, and trade; and to observe their dresses and manners. Among these, the Russian traders were remarkably distinguished, by their long bushy beards, naked necks, and dark lamb-skin caps of a peculiar kind of curled wool. They were constantly in the streets, dragging after them hand-sledges:while the Finns, with their shorn features, long dark unbending hair, and sallow countenances; eyes, extended lengthways, and half closed; a peaked nose, frequently inclining upwards, but always pointed; sharp and square chin; elevated cheek-bones, and pinched mouth; plainly shewed the life they led: add to this, large, high, and prominent ears; a small head; thin scanty eye-brows, turned upwards at their extremities, like those of the Chinese; high shoulders; short and small fingers; knees bent, and projecting forwards; and you have the genuine portrait of a Finn, evidently allied to the Laplanders. But if it were asked whom else they resemble, it would be difficult to say. If in Great Britain there be a race at all resembling them, it is, perhaps, the wild Scotch, who speak the Gaelic language, and who have the same dark locks and swarthy complexion: but the red-haired and rawboned tribes of the Lowlands in Scotland are indisputably a **Teutonic**

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CHAP.XII. Teutonic tribe, and perhaps originally Danes. It will be recollected, that, in former instances, we had been indebted to the annual fair for the insight we were enabled to obtain with regard to tribes inhabiting countries almost inaccessible to literary travellers. In this manner we became acquainted with the most distant colonies of Lapps, whose families visited the fairs of Kiemi and Trönyem. To the same cause we were now indebted for a familiar acquaintance with the natives of Tavastehûs and Savolax; perhaps the only remaining branch of that antient race of Finns who succeeded to the Lapps in this part of Scandinavia, and drove the latter from their settlements among the Aland Isles, and upon the southern shores of the Gulph of Bothnia, into the more northern territories they now inhabit. The Finns of Savolax certainly resemble the Laplanders, as much as the children of any family ever resembled each other. They are not so diminutive in stature; which perhaps arises from the difference of their diet and mode of life. When first we saw what were called Finlanders in Ostro-Bothnia, we thought they differed materially from the Lapps, in having, besides their more athletic form, light yellow hair. But we had there seen a mixed race, produced by the intermarriages of Swedish and Finland families; producing a comely and healthy race, who are constantly engaged in the wholesome occupations and labours of an agricultural life, and differ materially from the true swarthy and smoke-dried Finn; whole families of whom continued at this time to pour into Abo, in such numbers that the streets were filled with them, so that it was wonderful to us where they could all find a place for lodging. We observed

observed their sledges, with the horses yet standing in the shafts, CHAP. XII. filling the court-yards of all the shopkeepers and merchants, Manners of the Finns. during the entire day; and where they went afterwards we could not learn. Upon their first coming, the appearance of all of them was the same; all their sledges being similarly laden, and whole families walking by the side of them. These sledges contained provisions for themselves, and provender for their horses; an old net being constantly drawn tight over the burden, to keep the hay, which lay uppermost, from being carried off by the wind. So many nets worn out with fishing occupation, bespoke the ways of life of their owners, who supply with frozen fishes all the towns upon the coast, even to the distant markets of Petersburg; and are themselves Icthyophagites, inhabiting a vast region of lakes and rivers swarming with this valuable article of food. Over the net, upon these sledges, is always placed the little family-chest, containing the hoarded treasure produced by a year's labour, tobacco-pipes and tobacco, together with the household divinities and portable shrines of their country; such as were of old among the Israelites-"THE TABERNA-CLES OF MOLOCH, AND THE STAR OF THEIR GOD REMPHAN." Their first business, after their arrival, is to swallow the drams with which they are freely supplied by the tradesmen in Abo who are to traffic with them, and with which they become immediately intoxicated: but no people upon earth are more harmless "in their cups" than these simple Finns; their drunkenness being only manifested in the most ludicrous grimaces, and in more than usual kindness and attention to their female companions, who can hardly be called by the

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CHAP.XII. name of "the fair sex," lovely as they may appear to a drunken Finn. Sometimes, in these moments of intoxication, the grinning and grimaces suddenly give way to gravity; and then parties of them are seen together communicating, with an air of the utmost importance, the most trivial circumstances; as, what they intend to buy at the fair, and whom they shall buy it of; who gives away the most brandy, and promises to supply their wants at the lowest rate; which, however, is a matter of importance to them. At these interviews the dealers now and then contrive to be present, either in their own persons, or by means of their agents; because, while the drams, they have administered, do their work, the heart of a Finlander is open to all comers; all their little secret plans and purposes are then divulged; and, as the trade with them, and with the Lapps who resort to Abo at this season of the year, constitutes a very principal part of the commerce of Abo, the native simplicity and unsuspecting disposition of both render them an easy prey to the more artful dealers.

Their motives in visiting Abo.

We have said that the trade carried on with these tribes from the interior of the country constitutes a very principal part of the commerce of Abo; and hence it follows that the chief part of the articles exposed for sale in the shops are things calculated for their use: in fact, the best trade which any dealer can exercise in Abo, is that of supplying the natives of the interior districts with the different commodities they may require. Of all their wants, the principal are constantly the same; viz. tobacco and brandy,—drugs universally requisite, where mental resources are at a low ebb, for steeping in forgetfulness forgetfulness the tædium vitæ. The desire of obtaining them CHAP. XII is so great among the Finns and Lapps, as to supersede almost every other necessary article of life. From what we saw of the Finns, it was evident that both men and women would sooner eat their provisions raw, and even starve themselves. than be deprived of brandy and tobacco: therefore, if the price of an iron-kettle, for which a Finn has made a journey to Abo, astonishing both as to its extent and difficulty, should encroach too much upon his little fund for supplying him with these articles, he will spend all he has in brandy and tobacco, and return home again without the utensil for which he came. The author made an experiment here, which had often afforded him amusement among the Highlanders of Scotland (with whom the taste for these articles is much the same); namely, that of walking among the natives with about half a yard of what is called pig-tail tobacco, dangling from his pocket-hole: the consequence was the same in both countries;—the natives, attracted by the sight, would follow him anywhere, and cheerfully do whatever he required of them; wishing for no better payment for their labour than a cutting from the roll of tobacco. In one of the principal streets of Abo, we saw a porter passing through the market with a considerable burden of this rolled tobacco upon his shoulders; and he was literally hunted by the Finns, who pursued him as hungry curs run after a dog when he is carrying off a bone.

During this their annual visit to $\mathring{A}b\mathring{o}$, the dress of all the Their Dress Finns seemed to be universally the same: indeed, it is nearly the habit worn over all Finland, Lapland, and a considerable part

of

It consists of a jacket or coat made of white CHAP. XII. of Russia. sheep-skin leather, which is dressed, and worn with the wool inwards, as a lining, towards the body: this is fastened always by a sash or girdle about the waist. Long trowsers or pantaloons reach below the calf of the leg, and are bound about the instep. The feet are covered either with fur boots, or socks made of skins; over which are worn, what the Russians call Labkas, or sandals made of the bark of trees 1. their heads they wear a cap of fur; but which differs from that commonly worn by the Russians, in having flaps let down, so as to cover and keep warm the cheeks and ears. which are the parts otherwise frequently frost-bitten. With all these precautions against the inclemency of their winterseason, it is very remarkable that all the three nations, Finns, Lapps, and Russians, appear with their necks, and often with their bosoms, bare, in the most severe weather. Among all the tribes distinguished by their hardihood in this respect, are particularly to be mentioned the natives of Carelia; many of whom were now in Abo, with their necks and bosoms open to the atmosphere, when the mercury in Fahrenheit's thermometer was forty-six degrees below the freezing point, or thirteen degrees and a half below Zero; a degree of temperature that actually happened while we were there, at noon, upon the sixth of January. The fair begins upon January the twentieth, and continues but three days; during which time it is almost impossible to penetrate through the square wherethe market is held, or any of the streets leading

to

⁽¹⁾ See the Vignette to Chap. X. p. 172, of the First Part of these Travels, 4to edit. Cumb. 1810.

to it, owing to the many thousands of Finns, and other CHAP. XII. tribes, present upon the occasion; bringing frozen fishes and corn for sale; and bartering these commodities against salt, brandy, tobacco, domestic utensils, and sometimes silver vessels; which, with trinkets and other trifles, they severally return back to the countries whence they came. What would be thought of it, if at a fair in England, in one of our southern counties, (as for example, the fair of Lewes in Sussex.) the natives of the Orkney Isles were to be seen annually present, buying up the principal commodities exposed for sale? Yet distances of this kind, and much greater, are tra-Marvellous versed by the natives of Scandinavia, who visit the towns of which they undertake. Norway, Sweden, and Finland, journeying for a little tobacco, or brandy, or for an iron-pot, or any trifling articles of hardware, from one end of this extensive region to the other. In proof of this, one anecdote will be sufficient, which afforded Anecdote of us as much surprise as it can possibly excite in the Reader's mind: Being one day in the market-place of Abo, engaged in surveying the crowd of peasants from all parts that were there assembled, one of the Finns, whom we had noticed on account of the wildness of his aspect, his savage look, and uncouth appearance, suddenly sprang forward from the multitude, seizing us by turns by the hand, and evidently recognising us as old acquaintances and friends. After some time, we recollected having seen him somewhere before; and, upon inquiring whence he came, he seemed to be hurt; and addressing our interpreter in the Swedish language, said—" What, have the Gentlemen forgotten the poor Finn who ferried them to and VOL. VI. 3 L

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lected the boatman employed upon that occasion; who had actually traversed, in his sledge, with a single horse, the whole extent of the Gulph of Bothnia, from Kiemi, on its northern, to Åbo, on its southern extremity: and this amazing journey had been performed for the sole purpose of buying a little salt and tobacco, with which he was preparing to return.

Houses and Streets of Abo. Åbo chiefly consists of wooden houses, although there be many in the city both of stone and brick. The streets are of great length, some of them extending nearly an English mile. Being perfectly straight, they have a handsome appearance. A street leading from the former site of the old Monastery of Åbo, towards $Tavasteh \hat{\mu}s$, is as long as the Strada Toledo in Naples, or the Corso at Rome. There are three or four

Booksellers.

Monastery of Abo, towards Tavastehûs, is as long as the Strada Toledo in Naples, or the Corso at Rome. There are three or four booksellers' shops, but they are worse than those of Stockholm. The owners of these shops are only to be found in attendance during one hour in the day-from eleven till twelve: and if a stranger, calling at that hour, is desirous of examining the books, he is not allowed to touch one of A catalogue, written in the Swedish language, is put into his hand, which is all he is permitted to see: and when he has been at the pains of examining the list, he finds it to consist entirely of Swedish publications; few of which are worthy of notice. There are, however, some which one is glad to meet with; as, for example, the Dictionarium Anglo-Svethico Latinum of Bishop Serenius, with the curious preface of Ere Benzelius, printed at Hamburg, in 1734; also Widegren's Lexicon, Svensktoch Engelskt, printed at Stockholm, in 1788; which are almost essential to a traveller's journey through

through the country. For the rest, it is hardly possible CHAP. XII. to conceive a greater quantity of trash than it is usual to meet with in such places. The works of the Swedish historians are few in number; but even these it would be in vain to look for here. They are more likely to be met with in London or Paris, than in any of the Scandinavian cities, or even in Copenhagen. A person who is desirous of residing for any length of time in this University will of course avoid the inns, the very best of which is bad. The lodgings let to strangers visiting Abo are remarkably neat and clean: for a sum not exceeding four shillings English per week, a Price of good set of apartments may be hired; and no additional charge will be made for fire and candles. The only dear article is wine, which is supplied by the merchants of the city, who trade with Portugal and France; and is of better quality than it is usual to meet with in Stockholm. One dozen of very good Champagne sold for about thirty shillings; and the same quantity of good Port, for twentyfour shillings. Other Portuguese and French wines might be had in abundance; especially the different sorts of Claret; one of which, La Fite, is always called Long-cork in Sweden, and is the favourite wine in all company. They have also Hock and other wines from the Rhine and the Moselle.

Our frequent intercourse with the respectable Professors of this University, especially with Professor Porthan, of whose historical talents we have already spoken, gave us reason to hope that we should be able to gam some insight into the antient history and origin of the Finnish tribes.— Professor Porthan was himself a native of Finland, and well

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CHAP. XII. read and experienced in all that related to his own country-He often visited us; and we passed whole evenings men. in conversing with him upon this subject. From all that we Language and could collect, it was evident that the language of the Finns

People of Finland.

of

(1) This opinion is combated by the Authors of the Universal History, (see vol. xxxv. pp. 10, 11. Lond. 1762.) and, as it should seem, upon the authority of Voltaire, who knew about as much of the Laplanders and Finns, as of the inhabitants of the Moon. "Olaus," (observe the writers before cited, speaking of the Lupps,) and others who have copied him, tell us, that these people were originally Finns, who retired into Lapland. But why, as M. de Voltaire observes (Hist. de Russie, tom. I. p. 16). when they were moving, did they not choose a less northern land, where life would have been more comfortable to them?" To which question of Voltaire there is this plain answer-That all the comforts of a Laplander's life depend upon the comforts of his rein-deer; for which animal nothing can be better suited than the productions and climate of Lapland. If they had chosen "a less northern land," they would not have been provided, as they are, with the Lichen rangiferinus for their rein-deer, without which article of food, as it is well known, the animal degenerates and dies. The same authors maintain, that there is no similitude between the languages of the Finns and the Lapps: of the fallacy of which remark the Reader may judge from the following comparative Vocabulary. At the same time it should be stated, that there is some difference between the two languages: the appellations of the different parts of the human body are the same in both; but the names of the Heathen Gods of the Finns and Lapps are not the same:

is a dialect of that which is spoken by the Lapps, by many

ENGLISH.	LAPP*	FINN.
Nose.	Njuone.	Nena.
Shoulder:	Ålke.*	Olka.
Spine.	Nidtje.	Nisa.
Hand.	Kat.	Kasi.
Finger.	Suorm,	Sormi.
Thumb.	Pelge.	Peukalo.
Knee.	Puolu.	Polvi.
Foot.	Juolke.	$oldsymbol{Jalka}.$
Blood.	Warr.	Weri.
. Sinew.	Suona	Suoni.
To hear.	Kullet.	Kuulla.
To mourn.	Surgot	Sureta.
To lament.	Valot.	Valittaa.

of the Russian nations; and, what is much more remarkable, CHAP. XII. it has also been identified with the language of the Hungarians.

ENGLISH.	LAPP.	FINN.
To fear.	Pallet.	Peljata.
To answer	Vaslatet.	Vaslata.
To travel.	Mannet.	Menna.
To drink.	· Jukket .	$oldsymbol{J}uoda$.
Hunger.	Nelget.	Nelka.
To swallow.	Njalot.	Nuolia.
To freeze.	Kalmet.	Kylmettya
To fly away.	Pateret.	Paeta.
Brother.	Valja.	Veli.
Young.	Nuor.	Nuori.
Old.	Wuoras.	Wanka.
Sun. •	Peive.	Paiva.
Evening.	F.kked.	Ehto.
Cloud.	Palw.	Pilvi.
Ice.	Jagna.	Jaa.
Fire.	Toll.	Tuli.
Bay.	· Lukt.	Laaxi.
Smoke.	Suowa.	Sauwu.
River.	Jock.	Joki.
Isle.	Suolo.	Salv-sari.
Mountain.	Ware.	Wuori.
Stone.	Kedke.	Kivi.
Bog.	Suis.	Suo.
Leaves.	Muorje.	Marja.
Alder.	Leipe.	Le ppa.
Pine-tree.	Kuosa.	Kuusi.
Marten.	Nete.	Neta.
Louse.	Matok.	Mato.
Serpent.	Kerbma.	Karme.
Birch.	Ladde.	Lindu.
White.	Velkas.	Walkia.

All these, and many more, are enumerated in the Appendix to a printed Thesis, "De Bicarlis," written by Porthan, for an Act kept in the Schools at Abo by Frantzen, upon the 20th of Dec. 1786, upon which occasion Porthan himself presided.

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the second colony of Tâtars who settled in Scandinavia; the old and original colony, or first-comers, being the Lapps. The Finns also peopled the north of Livonia, the south of which country was inhabited by a very different race of men. They once occupied all the western and southern parts of Russia, as far as the Caspian Sea: being compelled to emigrate, in consequence of the incursions of the Monguls, they settled in Finland. What branch of them it was, and at what time the event took place that occasioned their settlement in Hungary

(1) The Reader will find this fact satisfactorily established by consulting the work of I.Sajnovics, "Demonstratio Idioma Ungarorum et Lapponum idem esse," 4to. Hafniæ, 1770. Also another very curious treatise, printed at Gottingen, in 1799, entitled "Affinitas Linguæ Hungaricæ cum Linguis Fennicæ originis, auctore S. Gyarmathi." But the principal confirmation of this curious circumstance was made by the discovery of Sajnovics; who, going to Wardhuus, to witness a transit of Venus on the Sun's disk, first observed, and afterwards made known, the striking affinity between the languages of Lapland and Hungary. In Strallenberg's "Descriptio Imperii Russici," printed at Stockholm in 1730, p. 32. there is the following quotation from Sajnovics:— "Sciendum est, in Europa et Asia, qua septentrionem et orientem respiciunt, sei classes populorum inveniri, quos passim sub uno Tartarorum nomine complectimur. Sunt hi

- 1. MORDUINI.
- 3. PERMECKIJ.
- 5. Wogulitzii.

- 2. SCHEREMISSÆ.
- 4. WOTYACKII.
- 6. OSTIAKI.

Omnes hi olim cum FINNIS, LAPPONIBUS, ESTHIIS, et UNGARIS unum eundemque populum constituerunt. Atque ad sie dictos Hunnos, vel Unnos, qui non erant Tartari pertinebant."—Nothing has ever puzzled philologists more than the extraordinary discrepancy of the Hungarian language, when compared with all others in its neighbourhood. Molnarius, a Hungarian, in the preface to his Hungarian Grammar, says, "Si quis ex me quarat, ad quam originalem linguam Ungarica referenda sit, vel cum quibus habeat cognationem, me nescire fatebor. Video enim eos, qui hoc tempore thesauros Polygiottos edunt, et linguas quasque in suas origines et classes referunt, Ungaricam semper in medio relinquere. Cum Europæis nullam connexionem habert hanc nostram certum est. An vero in Scythicis Asiae finibus, supersint Gentes aliquæ nostra lingua Hunnica utentes, juxta cum ignurissimis scio."

Hungary, cannot now probably be determined. There is no CHAP. XII. other evidence of the fact than the similarity of the two languages: but surely such evidence is conclusive; for, as it is observed by the celebrated *Ihre*, in his Suio-Gothic Glossary, when speaking of the analogy between the two languages *, and the importance of such proofs, "NON ENIM UT FUNGI. TEMERE ET INOPINATO. NASCUNTUR VOCABULA."—The Finns possess poetry and music; but they have no national dance, nor indeed any more ability or inclination for dancing than the bears which inhabit their forests. In this respect they may be said to resemble the Arabs, but differ from the whole In this poetry the Finns are what the Finnish race of Goths. Italians call Improvisatoris; composing extempore rhapsodies. Their poetical productions are without rhyme, and consist almost entirely of trochecs. All they seem to aim at, in these compositions, is alliteration; of which they are so passionately fond, that the whole effect of a song or a poem is often owing to words which in the same line either begin entirely with the same letter, or in which a repetition of the same letter frequently recurs. Professor Frantzen gave us a specimen of Finnish poetry, which will illustrate what is now said. He called it "a Native Song of a Finnish Maiden;" and we shall neither alter the title, nor make any change in the

⁽²⁾ This work was printed at Upsala in 1769. After speaking of the Lapland and Finnish race, and attributing to them a common origin with the Hungarians, in his preface the author says.—" Non enim arbitror also ratione facile explicari posse, unde exstiterit insignis illa, quæ inter linguam Ungaricam et Fennicam o'servatur affinitas, quaque tanta est, ut certa fide relatum mihi sit, in nupero bello, quod in Germania gessimus, milites quosdam, Fennicæ nationis, in Ungariam translatos, intra pereviguum tempus cum regionis eius incolis colloquia miscere potuisse."

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metre seems to be altogether irregular. For, understanding the mode of accentuation, it is only necessary that the Reader should observe the following order of the metre:

The first word consists of a regular trochee; the second, of one long syllable, followed by two short syllables, or a dactyl; the third, the same; with which the line terminates. Every line, therefore, is made to consist of one trochee and two dactyls. We shall now insert the whole of it, accompanied by a literal translation.

NATIVE SONG of a FINNISH MAIDEN.

Literal Translation.

Jos mun tuttuni tulisi,
Enne nahtyini nnakysi
Sillen suuta ssuikajaisin,
Jos olis sun suden veressa:
Sillen katta kääpäjaisin,
Jos olis karme kammen päässä.

Olisko tuuli mielelissä, Ahavainen kilelissä, Sanan toisi, sanan veisi, Kanden rakkahan valilla.

Ennenså heitan kerkurnat, Paistit pappilan unohdan, Ennerko heitan hertaiseni Kesan kestyteldyani, Talven taivutelduani. If my well-known should come, My often-beholded should appear; I would snatch a kiss from his mouth, If it were tainted with welf's blood; I would seize and press his hand, If a serpent were at the end of it.

If the wind had a mind,
If the breeze had a tongue,
To bear and bring back the vows
Which two lovers exchange:

All dainties would I disregard, Even the vicar's savoury meat; Rather than forsake the friend of my heart, The wild game of my summer's hunting, The darling of my winter's taming.

This language is full of vowels, and perhaps better adapted to Poetry than any other language known. Their words never begin with two consonants: if a word begins with a vowel, it almost always ends with one; at least, generally

this happens; although there be, of course, exceptions. CHAP. XII. Acerbi, who was himself a skilful musician, has published, in the Appendix to the second volume of his Travels, the curious variations given by the Finlanders to the five notes of which alone all their music consists. He has preserved their famous Runa, beginning

> " Nuko, Nuko, pico linto, Veni, Veni, Vestereki,"

as it is played upon the Harpu. He also mentions their dances; but this is an error, as they have no dance of their The dance to which he alludes, and which he witnessed on the banks of *Leivaniemi*, is not a *Finnish* dance. but one borrowed from their neighbours.

The merchants of Abo have no regular place of Exchange; Merchants of but they meet in the Square, and there transact their business. Indeed, the number of the wholesale dealers is very restricted. Mr. Bremer, a friend of ours, was one of this number: he had travelled over Europe, and possessed a good collection of paintings. We bought one of him, by Le Brun: a very good picture, representing the Crucifixion; which he had procured in France during the troubles of the Revolution, and had destined for the altar of a small chapel erected by himself near some glass-works in the neighbourhood. The trade between Abo and England, at this time, was very much restricted; and there was a report of its being entirely Spain was the only country from which salt was allowed to be imported, consistently with a regulation which prevailed all over Sweden. A cursory survey of the Maritime foreign commerce of all the maritime towns of Sweden and Sweden and

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Norway

CHAP. XII. Norway might be afforded in very few words. All the country, from Louisa, on the Gulph of Finland, to Abo, was occupied in commerce with Spain. Following the coast, along the eastern side of the Gulph of Bothnia, the inhabitants were engaged in trade with England. All the western side of the same gulph was employed in traffic with Stockholm, from whence the commerce is general over the world. Tornea, in the north of the gulph, trades with Stockholm and Copenhagen, and sometimes exports to England its commodities, of tar, deals, fish, and peltry. All the south of Sweden proper is engaged in trade with England and Holland. The ships of Gothenburg sail even to China. With regard to the Norwegian coast of Scandinavia, beginning from North Cape, westward, the inhabitants supply the ports of Denmark, Holland, and England, with fish and peltry; and also send the same commodities into Sweden, by the way of Tornea. Ships from Trönyem sail to Ireland, Scotland, and Holland. The trade of Bergen is confined chiefly to Holland; and that of Christiania, as we have before mentioned, to England: but the trade of the south of *Norway*, by the late abandonment of its interests on the part of England, and its cession to Sweden, has been entirely ruined'.

Singular custonis.

In Abo there are some customs rather of a singular nature. They ring their church-bells at a funeral, as we do in England

⁽¹⁾ This remark of course applies to the political changes that have taken place since the period of these Travels. Norway remains as it was, and as it ever will be,—the most beautiful and fertile country in the world, full of the grandest scenery in Nature; but its foreign commerce is annihilated, and its merchants are all ruined.

England at a wedding. When a robbery has been com- CHAP. XII. mitted, a person, beating a drum, goes through all the streets, to make it known to the inhabitants. They have here a Town Hall and a Parliament House: petty offences courts of Ja being judged of at the former, and capital crimes at the latter. The President or Judge passes sentence; but if the offender be condemned to death, his execution cannot take place without an order from the King. Both the Town Hall and the Parliament House are built of stone: as are also the seat of the Courts of Justice, the Excise Office. the house of the Governor, and the houses of some of the merchants. Abo is surrounded on all sides by rocky hills, which have a very naked appearance, and consist, for the most part, of granite.

In the questions which we put to the numerous fami- Distant expeditions of the lies of Finns who were now daily flocking into Abo, Trading Finrespecting the particular articles of commerce for which they had made such marvellous journeys, we were answered, that they came to buy salt and tobacco; bringing at the same time, in exchange for these commodities, corn, peltry, fish, butter, and cheese. Some of them were from parishes at the extremities of the two Galphs of Bothnia and Finland; and of these we have already mentioned one individual from *Kiemi*. What would be thought, in *England*, of a labouring peasant, or the occupier of a small farm, making a journey of nearly 700 miles to a fair, for the articles

⁽²⁾ The distance from Tornea to Abo, by the Swedish Vagvisare, Stockholm, 1776, p. 41, is 97 Swedish miles; which, at the rate of seven English miles to one Swedish, is 679 miles: but many of the Finlanders who resort to Abo fair perform journeys of far greater distance.

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CHAP. XII. articles of their home consumption? Except in this annual journey to Abo, the true Finns have little intercourse with the inhabitants of the maritime district: they inhabit the eastern provinces of Savolax and Tavasthuus; where they live in the midst of forests, by the borders of the lakes; and lead a mode of life which exactly resembles that of the agricultural or settled Laplander; in houses which have a hole at the top to let out the smoke, and in one large room which is occupied by the whole family. The natives upon the coast are either Swedes, or a mixed race of Swedes and Finns; of which nature are the inhabitants of the country from $\mathring{A}bo$ to the north, as far as Bjorneborg.

Foundation of the University.

The Literary establishment of $\check{A}bo$, as a University. is of very recent date, compared with the origin of similar institutions in our own country. Gustavus Adolphus, in the year 1626, first founded here a Gymnasium, or School, for the use of the town only. Fourteen years afterwards, Queen Christina, or, as the Swedes call her, Stina, converted the Gymnasium into a University, endowing it with the same privileges

^{(1) &}quot;In No. 135. the Spectator, upon the subject of the English language, observes, that proper names, familiarized in English, dwindle to monosyllables, but that in other languages they receive a softer tone by the addition of syllables. Thus Nicholas, in English Nic, becomes Nicolini in Italian; John, alias Jack, becomes Janot in French; The Swedes in this case are our allies, for we both follow this dwindling system: but with this difference, that, as we cut at one end of our words, they dock at the other. Who would ever imagine, among the softening French or Italian linguists, that NICHOLAS was expressed by Nils, as in Nils Marelius? CHRISTINA, by Stina? And who would guess that Greta was the same as MARGUERITA; Pehr, as PETER; or Jan, as JOHAN? Yet I think that these alterations are improvements; and I am much delighted with my female acquaintance under the abbreviations of Maia, Karin, and Phia, for MARY, CATHERINE, and SOPHIA; and which appear to be preferable to the abbreviations which are used of Bet, Kate, or Sophy."—Dr. FIOTT LEE'S MS. Journa L

privileges as Upsala; and she appointed the bishop of the CHAP. XII. diocese Vice-Chancellor. The number of resident Students Number of did not, at the time of our visit, exceed 300; but including all who had their names upon the foundation list, there might be about 500. The number of the Professors was as follows:—in the faculty of DIVINITY, three, with one Adjunct: in Law, one: in the faculty of MEDICINE, two ordinary, and one extraordinary, as Professors; together with an Adjunct: in Philosophy, nine Professors, besides two Adjuncts ordinary and one extraordinary. There was, moreover, a list of Teachers as before stated, called Magistri docentes; two for DIVINITY, and eleven for Philosophy: and one French Master; one Fencing Master; and one Teacher of Music, who was Organist of the Cathedral.

We had sent back our Swedish Interpreter the whole way from Abo to the village of Vargatta, near which place our travelling-carriage had been left upon a rock². This man had a most dreary journey to perform, upon the ice, as it must appear from the account we have given of our own; but the Swedes are used to such expeditions, and think nothing of He undertook it, in an open sledge, with the greatest readiness; and returned as soon as the ice was strong enough to bear the weight of such a vehicle the whole way, and brought it safe to Abo. The mode of travelling in the common sledges of the country is certainly the best, as far as the mere business of the day is concerned: it is, therefore, that mode of journeying which every one would adopt who seeks only to perform a given distance with the greatest expedition:

4.54 ÅBO.

CHAP. XII. expedition: but what is to become of a traveller in the night. a travellingcarriage.

State of the accommodavellers.

Importance of in such a country and climate, where there are not only no inns, but where he will find it actually impossible to procure a place of rest; nor even a stable, in which he may find clean straw for his couch, or a place where he may lie down? seems as if the natives of the dreary district between $\mathring{A}bo$ and tions for Tra- Petersburg had exerted their utmost ingenuity, and with fatal success, to banish from their dwellings every thing that bore any relationship to comfort and cleanliness. They lie down themselves upon dirty boards, filthy with grease and smoke; in dark hovels, stinking of putrid fish: and these boards, which they use for their beds, are not put together horizontally, so that a traveller might cover them with skins, and thus contrive a resting-place; but they are set up in a sloping position, like the roof of a house, with a foot-board to arrest the feet. and prevent the person sleeping upon them from slipping off; to which a stranger, unused to the practice of being extended like a carcase upon a butcher's shamble, is constantly liable. Our travelling-carriage, therefore, was for us a moveable home; without which it would be folly, in this season of the year, to think of making any further In the summer season the case would have been different; because the traveller, well armed against mosquitoes. may then lie down in the open air, quite indifferent as to the state of the dwellings in his route'.

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⁽¹⁾ Such, too, is the expedition with which voyages among the Aland Isles are then performed, that Professor Malthus and the Rev. W. Otter, who passed this way, from Stockholm to Petersburg, in August, came in a boat from Skarpans to Abo, a distance equal to 117 miles, in a single day. In the course of this voyage, which they describe as resembling a passage across a beautiful lake sprinkled with islands, they were only

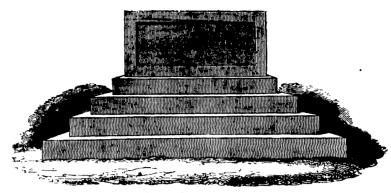
As soon as the carriage arrived, we took leave of our CHAP. XII. friends, and prepared for our journey into Russia. Knowing Cursory renothing of that country, or of its inhabitants, we set out full wrong to deof hope that our gratification would be at least equal to that we had received in visiting Sweden, and little prepared for the grievous disappointment we afterwards experienced. Every thing tended to excite in us a curiosity to become acquainted with the Russians;—the great figure they were beginning to make in the political world; and the memory of the illustrious names connected with the history of the country. There is something imposing in the mere name of such a mighty empire. Extending from the Caspian to the Icy Sea, and from the Baltic to the Pacific Ocean, it presents, under one Sovereign, a greater extent of territory than all the empires of antiquity. It is therefore with an aching heart, but with more of regret than indignation, that the writer of these pages purposes to make known to the English Reader, what

flections preparture for Rusna.

once out of sight of land; namely, in sailing to Ekerö. Their carriage had been taken to pieces, and put into their boat. They left Skarpans at a quarter past six in the morning of August 7, and reached the Custom-house at Abo a quarter before six in the evening. They had, therefore, performed their delightful voyage in eleven hours and a half, at the late of ten miles an hour the whole way. They did not keep a direct course; but sailed in and out among the islands, and passed a number of very narrow straits. They describe the appearance of the islands in summer as "sometimes exhibiting a prospect of bare rocks; sometimes, rocks covered with firs; and sometimes, but not often, cultivated lands, with farms upon them." The villages and little towns are "built of small wooden houses, many of them projecting into the water." Upon the rocks near one village they counted nineteen windmills, all going. The whole had a very picturesque effect, and the scenery was charming. The rocks were no where very high. The woods were generally of firtrees, but sometimes mixed with alders, birch, &c. The entrance of the river Aeura, in sailing up to Abo, possessed striking beauties, as the rocks were higher; and nothing could be more agreeable than the voyage they had made.

CHAP. XII. what his fate will be, if hereafter, pursuing the same route. he should venture to traverse the Russian dominions, and especially Russian Finland, in his way to Petersburg. Every effort of a powerful people has hitherto been made to suppress the truth with regard to Russia. Large sums of moncy have been constantly paid, both in England and upon the continent of Europe, to buy up the public journals; and to engage writers who should answer all the views of the Russian Cabinet, by studiously concealing the truth with regard to that country, and by propagating false accounts of its inhabitants. It is not therefore to be subject of wonder that we fell so easily into the snare which was spread before us. As we did not expect to meet with refinement, we had no right to complain of the barbarism of the Russians; but the rude and simple manners of unenlightened nations, however barbarous they may be, are sometimes joined to benevolence, if not to honesty: yet the very word honesty, if it exist in the Russian language, is unintelligible Russians: they know not the virtue to which it applies. If any trace of it lie concealed throughout the wide extent of the Scythian dominion, it is, perhaps, buried in the breasts of those victims of tyranny who have been condemned, for their love of truth, to a life of labour in the mines of Siberia: or it may exist in some dungeon of the empire, the access to whose walls is carefully guarded by Despotism, that unnatural monster, who can only thrive where virtue is oppressed. At this time, Sweden had not lost her valuable possessions in Ostero-Bothnia; but the designs of Russia were well known to all the best-informed men of the country. From their account.

account, therefore, of the people we were about to visit, CHAP. XII. founded on the bitter experience of the Finlanders with regard to Russia, we had some prescient view of the gathering storm that was about to burst upon the land: but we entertained a hope, that the Cabinets of Europe, much better aware of what was going on, would never allow the predatory designs of the Russians to be carried on unmolested. A great national animosity had always subsisted between Sweden and Russia; and we hoped that to this might be attributed something of the dark picture given to us of the latter. Sweden, boasting of her former victories, saw with fear and distrust the rising prosperity of her mighty adversary, and the indifference with which more distant nations regarded the encroachments the Russians were everywhere making upon the territories of their neighbours. with an appetite for dominion, that grows by what it feeds upon, witnesses every year, as it passes, some new district annexed to her empire. She was now viewing with longing eyes the rich fields of Finland, which intercepted the progress of her boundaries towards the Gulf of Bothnia: and Sweden and Norway will next become a prey to her devouring ambition and avarice; as will the whole of Persia, India, and Turkey;—when it will be too late for other Powers to interfere, and to curb the ferocious system of oppression; which in due season they might have restrained!



Tomb of Count Ernsperd.

CHAP. XIII.

FROM ÅBO IN FINLAND, TO PETERSBURG IN RUSSIA.

Journey from Åbo to Helsingfors—Description of Helsingfors—Fortress of Sweaborg—Tomb of Count Ernsverd—Strength, size, and importance of Sweaborg—Route from Helsingfors to Borgo and Louisa—Approach to the Russian frontier—Boundaries of the Swedish and Russian Dominions—Contrast between the Natives of the two countries—Mode of recruiting the Russian Army—Iniquitous conduct of a Russian Inspector of the Customs—Difficulties that impede the Traveller—Arrival at Frederickshamm—Appearance of that place—Regulation relating to Posting in Russia—Description of the Post-houses in Russian Finland—Intense cold of the weather during the night—Arrival at Wibourg—Appearance of the Soldiers of the Garrison—Mode of inflicting punishment on Description—Inhabitants of Wibourg—Arrival at Petersburg.

CHAP.XIII.

Journey from Abo to Helsingfors. The journey from Abo to Helsing fors, in the summer time, affords a series of prospects, which, in their character, cannot be equalled in the Swedish dominions; but in the winter season, it is performed under circumstances of so much dreary uniformity,

uniformity, that the traveller is glad to pass over it with all CHAPATH. possible expedition. In this long route, therefore, little will now be said respecting any particular part of it: the only objects attracting notice, being the houses of relay; which are much the same everywhere, seldom rising to mediocrity as to the accommodations they offer, but situate in a country full of picturesque beauty. This part of Finland is much cultivated: the forests having been cleared, and enclosures made, of course the population is greater than in other places. The whole country appears decked with farm-houses and village-churches, rising to the view, or falling from it, over an undulating district, amidst woods, and water, and rocks, and large loose masses of granite: it may be called Norway in miniature: and the extraordinary novelty to an English traveller, of seeing vessels gliding out, as if from the woods, among which are so many bays, lakes, and little inland seas, in that season of the year when the ice has not locked up the waters, is as delightful as it is striking. Higher up the country, towards the north, there are scenes which were described to us as unrivalled in the world. Every charm which the effect of cultivation can give to the aspect of a region where Nature's wildest features—headlong cataracts, lakes, majestic rivers, and forests—are combined, may there be seen.

The road from Abo to Peike, the first stage; one Swedish mile and a half, is broader than the generality of roads in Sweden, and very good. Here we found the people speaking Finnish, of which we understood very little. Our next stage, to Vistū, was through a tract of land surrounded by hills sprinkled

CHAP.XIII. sprinkled with firs, calling to our mind the scenery near Gothenburg in Sweden, where all the hills seemed formed into basins. As we proceeded, the country was broken with woods and forests of birch and fir; and on our right we had, occasionally, views of inlets, or bays of the sea. From the information of some travellers who passed through the part of Swedish Finland that lies between Abo and Louisa, we found that nothing could be more incorrect than the account they had received at Stockholm respecting the face and nature of the country. They had been told, that they would see one continued black forest: instead of this, the tract, through which they passed, in the month of August, presented, frequently, scenery of a most beautiful and picturesque nature. The soil, in some places, was extremely fertile; the pasture lands very rich; and the crops of corn, of which a great quantity is exported from this part of the country, abundant.

> By the friendship of Baron D'Armfeldt, upon our arrival at Helsingfors, we were conducted to the famous fortress of Sweaborg; perhaps, after Gibraltar, the strongest in Europe. It is very difficult to obtain admission: and we were told that even the Baron, who was second in command in the garrison, could not procure for us leave to enter. But when he presented us to the General, the latter, after being assured that we were not travelling in any military character, permitted the Baron, and a captain of marines, to conduct us over it. I must, however, first speak of Helsing fors, as it occurs first in order.

It is a small but handsome town, containing many stone Description of Helsing fors. houses:

houses; and, considering the size of it, carries on a very CHAP.XIII. active trade: the shopkeepers deal with the neighbouring farmers, and, as at Abo, with the Finns, who descend in numbers in the winter. The town was crowded with them. when we were there. The foreign commerce, as well as that of all the south of Finland, is exclusively with Spain, to which country it conveys deal planks, and brings back salt; the return with this article being considered of great importance. Helsing fors, like Abo and Louisa, is renowned for its deal planks; some of which we found to be twelve feet in length and two inches in thickness, perfectly fair, and very free from knots. Twelve of them, when shipped, cost, including all expenses, two rix-dollars and a half of the paper currency; about eight shillings English, according to the present state of exchange, which must render the profit very high. The expense of building vessels is not great here; and it is still less in the Gulf of Bothnia. A ship of 150 Swedish lasters may be purchased for six thousand rixdollars; and many well-constructed trading brigs do not cost more than two thousand. Of all the deals exported from the Gulf of Finland, those of Frederickshamm, a town in the Russian dominions, are preferred by the Spanish merchants.

The houses have an appearance of comfort; and the inhabitants, we were informed, lived in perfect harmony and goodwill among each other. We experienced great attention and politeness from many of them. Nothing can be more gay and pleasing than the scene, exhibited on the ice, from Helsing fors to the fortress of Sweaborg, which is situate on an island, distant two English miles. The road is marked on

the

CHAP.XIII. the snow by trees, or large branches of the pine, planted in the ice. Sledges of all sizes and descriptions, open and covered, of business, burthen, or pleasure, plain or decorated. with beautiful little prancing Finland horses, are seen moving with the utmost rapidity, backwards and forwards, the whole way, from morning to night. Officers with their servants. ladies, soldiers, peasants, artificers, engineers, form a crowded promenade, more interesting and amusing than that of Hyde Park in London, or the Corso at Rome.

The entrance to the fortress of Sweaborg is by a long and

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durability

narrow arched way. Every thing around us—the massive walls, numerous batteries, intricate mazes, the prodigious quantity of cannon, and the swarms of soldiers, sentries, posts of guard-announced the strength and consequence of the

Fortress of Sweaborg.

> place. Our passports and persons underwent, as we entered, a very rigid examination. The house of the Commandant and principal officers is a lofty white edifice, placed on an eminence, over the gateway. On an area immediately before it, stands the simple but characteristic Tomb of Count Ernsverd, the engineer who planned the works'. chastity and purity of taste which are shewn in this tomb,

Tomb of Count Finsperd

at once bespeak the Augustan age of Sweden, and the genius of Gustavus the Third. Whatever is elegant in art, whatever is great and correct in design, whatever is magnificent, all came from him; and to the same source the Tomb of Ernsverd owes its origin. It is worthy of the finest age of Greece; and has, at the same time, an Etrurian character of durability and massiveness. It is raised upon an ascending CHAP.XIII. scale of four tablets, perfectly simple and plain in all its parts; except, that on each of its oblong sides, which are indented, there are short inscriptions in gilt letters: the snow which covered them had been hardened by the frost; and we were not able to remove it, in the few moments we had leisure to examine the tomb.

Not being at all conversant with matters relating to fortifi- Strength size cation, we can give only an imperfect account of the interior ance of Suratory wonders of this admirable fortress. Its basins, and canals, and dry docks, have been cut, with infinite labour and art, out of the solid rock; and works for its further improvement are still going on. The roofs and chimneys of all the store-houses and magazines are covered with copper. Strong ladders reach from the basins to the tops of the buildings, which, in case of fire, must be particularly serviceable; for they are as stout and broad as staircases; and every one of them would allow persons ascending and descending to pass each other. In different parts of the fortress are a great number of cannon taken from the Russians, which may be distinguished from those of Sweden by their shortness.

Here are kept the Galleys, capable of being worked equally with sails or oars. The dry docks, large enough to receive the fleet, have a very narrow entrance: one vessel only can be admitted at a time. Batteries of various heights, appearing like mountains of massive masonry, command every port and avenue of the works. Water is admitted by gates or locks; and, when necessary, it is afterwards carried off by mill-pumps. Every vessel has its proper place: and the ships

CHAPATH are laid up in a manner so convenient and admirable, as to be ready at the shortest notice; and are carefully preserved, when not in use. At the time of our visit, they were constructing a dock sufficiently large to enable them to build a ship of one hundred guns in it'.

> The garrison, at present, consists of three regiments, one of marines and two of infantry. There are besides, in Helsingfors and Sweaborg, twelve hundred artillery soldiers; but only two hundred in the fortress. In time of war, the garrison contains ten thousand men, a number necessary to its proper defence. For these, every accommodation can be afforded within the walls. All the officers reside here with their families, in very comfortable apartments; but we were informed, by those who had served in France, in the Régiment Royale de la Suède, that in Lisle, and other fortresses of that country, the accommodations were far superior; a captain being

⁽¹⁾ As the Fortress of Sweaborg has been seldom visited or described, some additional information is here annexed, from Fortia's Travels in Sweden, in 1790-1792. fortress is composed of seven small islands, or rather rocks, three of which are joined to each other by bridges. It requires half an hour to pass over from Helsingfors to the principal island (Gustafholm), on which the Governor's house is situate. No communication between the fortress and the town is practicable during the prevalence of a strong south-west wind. The construction of this place was begun in 1748; and although it be not yet complete, it is in a perfectly defensible condition. The harbour is excellent, being capable of containing sixty sail of the line. Large vessels cannot enter, but by an extremely narrow channel, commanded by the guns of the fortress. We saw, exclusively of mortars, one hundred and fifty pieces of cannon, which point upon this passage; and nearly one thousand pieces altogether, including the land batteries, in the different forts. Many of the works are cut out of the solid rock. There is an eighth island, contiguous to that in which the fortress is situated; whence, in case of the enemy getting a station, it might be successfully attacked. See Pinkerton's Voyages and Travels, vol. VI.

being lodged better there, than a colonel in Sweaborg. inhabitants of the garrison live in the most pleasant and social manner: they have their assemblies and balls, at which more than forty ladies, many of them of great beauty, make their appearance.

The CHAP.XIII.

Sweaborg is much larger than Portsmouth; and, according to the opinion of Swedish officers who have seen both places, it is much stronger. They deem it impregnable: but whether it could be properly defended in the winter-time-when access to it is rendered so easy by the ice, and when, for want of water, which then becomes frozen in all the basins, a conflagration would produce the most dreadful effects—we shall leave to the decision of persons who are more competent than ourselves to speak on these matters. Notwithstanding the extent of the works which were at that time carrying on, there were not more than three hundred men employed when we were at Sweaborg.

From Helsing fors we came to Borgo, where we stopped at Route from a good but extravagant inn. The town is small; though, for Borgo and Finland, it is a considerable one. It has a Gymnasium, or School; and possesses a Library, in which are preserved some of the earliest works of Linnaus. The houses are of wood, and painted red: the inhabitants are chiefly Swedes. As we proceeded to Forsby, the road became more rocky. We passed some woods of birch and fir; and in the latter part of our route, before we arrived at Louisa, we perceived a lake on our right. As we entered this town, we were stopped by a Custom-house officer; who intended, as we supposed, that we should unpack all our baggage: but he at last observed,

that 3 O VOL. VI.

CHAP.XMI. that if we would give him something, he would suffer us to pass. The manners of the people began to change; and we found nothing here to remark, but dirt and drunkenness. The town is rather pretty, and the principal street is wide: in summer it may perhaps be entitled to more praise; as, doubtless, all these maritime places, situate on bays, creeks. and among islands, must then have a beautiful appearance; for their shores are rarely destitute of trees.

> We could not quit Louisa so early as we wished; being delayed by our pass, which, it should seem, was examined by many different persons; for it was sent for, and brought back again, several times. It was necessary also to have our Swedish paper changed for Russian money, that we might be able to pay for our horses on the other side of the frontier. We here found that the Russian rouble was worth forty schillings Swedish. In going to Tesjo, we passed a forest of firs, growing in the interstices of large loose rocks of granite. We slept at this place, within half a mile of the Swedish and Russian frontiers, in order that we might be ready to undergo the examination of the Custom-house officers early the next morning.

Approach to the Russian Frontier.

We know not how to paint the extreme contrast which appears in the short distance of an English mile,—from the Swedish to the Russian guard. The country is still Finland, but it is Russian Finland; and to heighten the difference between an union with Sweden, and a subjugation by Russia, the Russian Finns are not those who make their appearance at the guard, but soldiers from the interior of the empire; the reason of which will soon appear. In a company

of the Tavasthuus militia, stationed at a small distance CHAP.XIII. from the Swedish Douane, on the east side of the western branch of the river, which separates the two countries, we had the last view of the benevolent and mild inhabitants of Sweden. They were a sturdy and athletic troop: and as it gave us a melancholy satisfaction to prolong the few moments of our farewell, by conversation with them, the officer on duty politely accompanied us as far as the Russian guard.

dominions.

In passing the little island which lies between the Boundaries of Swedish and the Russian bridge, we expressed a curiosity to and Russian know what formed the precise boundary of the two countries. The Swedish officer shewed us a stone of about two tons weight, which is the only object that is supposed to break the neutrality of this interval between the respective posts. Higher to the north is the Tammijara, a small lake in the western branch of the Kymene river; which river, with the more remote waters of the Pyhà and Wuoka lakes, forms the line of demarcation.

When the mind has been accustomed to repose implicitly on the fidelity and virtues of those around us, it is difficult to submit it all at once to a system of suspicion and caution.

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^{(1) &}quot;Sweden is at present reduced to the narrow but long country situate between Norway on the one hand, and the Baltic and the Gulf of Bothnia on the other. The loss of Finland is to be regretted, as a diminution of her population: the Finlanders were fully as warlike as the Swedes; and they seem to have a superiority over them in industry. But these disadvantages are scarcely a balance to the additional security which Sweden has thence derived, and to the consequent diminution of their expenses, as far as it is necessary to provide for the security of their country."—Thomson's Travels in Sweden, 1813. p. 417.

CHAP. XIII. The confidence which had originated in the long-experienced honesty, goodness, and placid benignity of the inhabitants of Sweden did not entirely forsake us, as it ought to have done. on entering Russia. A few miles, nay, even a few yards, conduct you from a land of hospitality and virtue, to a den of thieves. We suffered for this want of caution, in the loss of the first moveables on which the Russians could lay their hands. We had, indeed, been forewarned of their pilfering disposition, but did not imagine that we should so soon experience the truth of the information which we had received respecting this part of the Russian character.

We have alluded to the guard of soldiers who are sent from

Contrast between the two countries.

Natives of the the interior of the country, to be stationed on the Russian frontier. In this, we see a remarkable contrast in the manners of the two nations. The Swedish frontier is guarded by the Tavasthuus militia, natives of the districts they are stationed to defend. Sweden carries on no war against its own subjects; it transacts no deeds of darkness on its own frontier; the defence of them is entrusted to armed natives. But with Russia, the case is very different: her Government was employed, at the time we entered the country, in kidnapping, during the night, all the young men who could be found in their houses, to supply the armies. Their hands and legs were bound, and they were cast into sledges, like calves. As this naturally begets a desire in the Russians who inhabit the borders to migrate to the Swedish side, that they may experience the influence of a milder government, it is necessary to have piquets stationed along the line, and roving

Cossacks,

Mode of recruiting the Russian army.

Cossacks, to prevent desertion. Strangers are evidently CHAPAIII. wanted for this purpose; as few of the natives would intercept a brother or a friend, in his flight from tyranny.

Having crossed the Russian bridge, we were ordered to halt, by one of the sentinels, a dwarfish meagre figure with a sallow complexion and a long cloak, who, with scarcely strength enough to shoulder a musket, stood shivering before a large fire. A little above was the wretched hovel which serves as a guard-house. Notice being given of our arrival, we were ordered to approach; and after a few necessary ceremonies, we passed to the Custom-house, a little higher up on the left hand. Here we were ushered into a tolerably neat little room, where sate an officer with a lame foot on a couch. He could neither talk French nor English, and very little Swedish; so that we had no means of communication, until at length he surprised us by asking if we spoke Latin. Our passports were then examined, and returned. We had reason to fear that our servants would be detained; for although they had been included in the passports of the Danish and Swedish Sovereigns, and expressly mentioned in that of our own Government, they had not been included in the Russian. Our passports were, however, signed and delivered to us, with an assurance that we were at liberty to proceed. As we advanced to the carriage, an inspector of iniquitous the Customs, a renegado Finn, informed us, in the Swedish Russian Inlanguage, that he had two handsome pipes to sell. thanked him, but informed him that we did not use tobacco. "Yah so!" he replied; "but you have some Swedish money,

which

⁽¹⁾ For the different import and meaning of this expression, see p. 296 of this volu

CHAP.XIII. which I will accept in exchange for Russian." He then produced two false notes, one for fifty, the other for five roubles, which, he said, was all the Russian money he possessed. As the imposition was too glaring to pass, and the Swedish officer openly pronounced the notes to be bad, we declined having any dealings with the Inspector. Upon this, he snatched from my hands one of our passports; and opening it, declared, that as the names of the servants were not included, they might attempt to proceed at their peril; calling, at the same time, to the soldiers to mind their duty, or to abide the consequences. We in vain entreated that they might be accompanied by a guard to Frederickshamm, where we might state our situation to the Commandant; adding, that all expenses should be defrayed by us, and the soldiers liberally rewarded. We represented, that a journey of three hundred versts, to Petersburg, in so severe a season of the year, with so much baggage, and without a knowledge of the language, would subject us to the greatest hardships, and perhaps to the loss of all our trunks. But our attempts to persuade him were fruitless: his honour had been wounded by the detection of his villany; and therefore, making a virtue of revenge, he would for once fulfil his duty to his Sovereign, by exactions of the most vexatious and frivolous kind. He had also, without doubt, a hope that our servants would be left in his hands; by which means a new demand might be made upon us, subject to the most flagrant imposition. The Swedish officer, with the politeness and hospitality of his nation, and justly indignant at what he had witnessed, conducted them back to Louisa, assuring us that they should be taken care of, until we were able to send for them from Petersburg.

The author has frequently avoided, in the course of the CHARLYHI. account of these Travels, the unnecessary insertion of circum- Difficulties stances and adventures, the narrative of which might have the the traveller appearance of egotism. The statement of what occurred on first entering the Russian frontier will not, he trusts, expose him to this charge. An omission of that which serves to characterize a nation, or part of a nation, and which may prove a caution to travellers, would be, indeed, neglect. We might add, to the conduct of the inspector, a catalogue of difficulties which quickly succeeded each other, during our expedition to Petersburg, through a country more inhospitable than the deserts of Tahtary. Attempts were frequently made to impede our progress. In the small towns, there is generally found a miserable innkeeper, to whom the officers are frequently in debt: it is his interest, therefore, to detain the traveller: and the officer on guard, or even his superior, has little difficulty in discovering some method by which this object may be accomplished.

The tract of land between Aberfors and Frederickshamm is the scene of the last glories in the life of Gustavus the Third of Sweden. He carried his conquests even to the walls of that fortress; and, had it not been for the perfidy of his officers, would have received a more splendid crown of victory within the city of Petersburg. The spot, where the contest between the armies was most severe, is about three Swedish miles from Aberfors, at Anjala. In this route, wherever the Russians appeared, a striking difference was visible between their figure, features, manners and dress, and those of the Finns. The hair and complexion of the latter were

lighter:

Arrival at Frederickshamm.

CHAP.XIII. lighter: the Russians were long beards, with their necks bare. At a short distance before we arrived at Frederickshamm, we passed round a Russian station, the fortifications of which had been lately thrown up. We considered ourselves happy in not meeting with any further interruption. We saw few peasants; and those whom we met had a very poor and wretched aspect.

> It is impossible to conceive a more desolate tract of country than the whole route from Louisa to Frederickshamm. white houses, particularly the Town-house, a large building in the centre, painted white and green, gave to Frederickshamm a lively appearance. The fortifications were very regular; and the street, by which we entered, was straight, and terminated in the Town-House. We were suffered to proceed through the exterior parts of the fortifications without interruption; but on coming to the interior gate, we were stopped, and our passes examined. While we were detained, a sudden shout was raised by all the soldiers on guard; and they ran to arms. We found, on looking round, that the appearance of the Governor, in his carriage, was the cause of this bustle. The beating of the drums, and the noise of the muskets, made our horses rear and plunge; and as we were in the gateway, the Governor was obliged to give orders to the soldiers to cease, that we might move on one side, and make room for him. When he had passed, some of the officers spoke to us in French, and asked how long we proposed staying in the town; and said that our passports should be returned to us the next morning. We were informed, that it was necessary to obtain from the Governor a paper, called

Regulations relating to Posting in Russia.

poderosnoy,

poderosnoy, to shew at every post-house; as without it we CHAP.XIII. could not procure horses. For this paper we were to pay one copeek a verst, for each horse. The Commandant of the garrison shewed us great civility: we attended his levee, with all the officers, whom he received in his robe de chambre, with his breast and bosom bare. Having received our passports, which were signed and countersigned, and our permit for horses, we set out; but were stopped for above half an hour on quitting the town, and our passports were again examined.

Frederickshamm had once a little trade; but since the exportation of timber has been forbidden, and the town has been filled with soldiers, this has almost entirely ceased. We proceeded to Kouxis, distant sixteen versts, through a stony and rocky kind of country: the road during the next stage was varied with more hills. At every post-house, when we asked Regulation for horses, twelve or fifteen peasants generally made their Posting in appearance. They were dressed chiefly in a kind of loose coarse linen coat and trowsers, and had a particularly clownish and boorish look. At each of these houses, a Russian soldier is placed, as the manager; and to him we were directed to give ten copeeks, for what is called, in England, drink-money. He also receives the sum which is to be paid for the horses; and demands it before the traveller leaves the place. This regulation was caused by the conduct of the Russian officers, who not unfrequently paid the poor peasants with the blows of their canes, instead of with copper. Many of the houses, in the villages we passed through, were without chimneys; and

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CHAP.XIII. the houses themselves were of smaller size, and of a more miserable appearance than those we had remarked in Swedish

thePosthouses in Russian Finland.

Finland. The peasants whom we saw in this journey bore a strong resemblance to the Laplanders. It is almost impossible Description of for the Reader, from any thing he has either seen or heard, to form any idea of the inside of these post-houses. That at Ursala was nothing but a dark hole: a partition with something like a bed in it was reserved for the Russian soldier, to whom the Finnish peasants seemed to pay great respect. The other part of the room had a broad bench round it, placed against the walls, on which the peasants slept. We were, upon the whole, much struck with the evident inferiority, both in looks and apparent condition, of the Russian Finlanders, in comparison with the Swedish.

the weather during the night.

The distance between Frederickshamm and Wibourg is one hundred and ten versts; and there is not a single house in Intense cold of which it is possible for a traveller to sleep. The thermometer fell, during the night, to fifteen and twenty degrees below o of Celsius: and we were sometimes compelled to go into the post-houses for warmth. In the carriage, our breath froze into a coat of ice on an earthenware bottle, as we drank some wine; and if we held it to our mouth, the skin stuck to it. All the furs we could apply to our bodies and feet were no defence against the frost. The poor peasants, who drove us, presented, at the end of every stage, faces as it were in armour with ice; and their fur-caps and hair were covered with icicles. When we stepped into their houses, which are as hot as a vapour-bath, we found the air within, on

opening

whirled round and round, so that every thing in the first moment is invisible, as if the room were filled with a thick smoke. When this has subsided, a scene presents itself, to which nothing in any part of Lapland has the least resemblance. The only light is afforded by a deal splinter stuck horizontally within the wall. The roof and sides are as black as night. As the thick vapour disperses, a figure appears close to you, with a long dark beard, and hair eyes, distilling rheum; and a face fixed in mute astonishment. Suddenly, from a sloping bench like a writing-desk, extending the whole length of the apartment, twelve or thirteen other similar spectres start up, with a Babel confusion of tongues—Finnish, Swedish, Russian.

There is no country where horses are supplied with greater expedition: sixteen may be found waiting at every stage; and in no part of *Europe* can accidents to your harness or sledge be more quickly repaired. Our traces broke; and half-a-dozen peasants, in the midst of a crowd, which one would have imagined would have only confused them, formed a braided work of ropes in a few moments, which lasted the whole of the way from *Frederickshamm* to *Wibourg*. We travelled, during the night, without any moon; frequently at the rate of ten versts in the hour. Ten copeeks, or five pence, for six horses,

⁽¹⁾ Maupertuis and the French Academicians, in their journey to Torneå to measure a degree for ascertaining the figure of the earth, made a similar remark: "On opening the door of a warm room, the external air, rushing in, instantly converted the vapour into a fleece of snow."

CHAP.XIII. horses, is the usual sum paid to the peasants; but fifteen (or sevenpence-halfpenny), which I believe is generally given by English travellers to these poor men, is received by them with surprise and joy.

Arrival at W thour g

When we arrived at the gates of Wibourg, our drivers suddenly withdrew; and, huddling together under the gate. remained for two hours in a degree of cold that we thought would have killed the horses, without telling us the reason. The gates of the fortress were not yet opened; and we waited until seven o'clock in that situation. As soon as we arrived, the Commandant and General-in-chief of the forces at Wibourg, General Von Vrangel, sent for us, by one of his officers; received us with great politeness; invited us to a masquerade, and to dinner; and requested us to attend him upon the parade at eleven o'clock. He said he had received orders to permit us to proceed on our journey to Petersburg, ever since the month of May. This was information of great importance to us; for an officer soon discovered and remarked, that our passes were not from the Crown.

Wibourg, in the time of the late Empress, was burnt down: it has been rebuilt upon a regular plan. edifices are all of brick, none of wood being allowed; and are large and grand: the square is very spacious. town has a military appearance: drums are heard from morning to night: the troops are exercised every day, not excepting Sundays. We could not help admiring the extraordinary regularity and accuracy with which they performed all their manœuvres. The soldiers, when collected together, seemed a fine set of men; but when we examined

them individually, we were disappointed in their appearance. CHAP.XIII. The officers, of whom there were many present, were, in general, ill-looking, small, badly made; and very few of them had the air of Gentlemen. Once or twice during the exercise, every one present pulled off his hat: we observed this ceremony repeated frequently; and there was much apparent servility on the part of the inferior officers towards the higher. With the leave of the Commandant, we walked round the ramparts, accompanied by the Major de Place, who was also a Lieutenant-colonel. He informed us, in French, that the troops commanded by General Von Vrangel consisted of four battalions, each of a thousand men; and that there were in addition, in the town, two battalions, also of a thousand men each, under the command of General Kutusof, the General-in-chief of the forces in Finland; and a corps of engineers. The town is generally provisioned for a year: it seemed to consist chiefly of the houses of the officers, barracks for the soldiers, magazines, and churches. To garrison the place in time of war, the Colonel informed us that sixteen thousand men would be necessary. The fortifications were strong and regular, but very little assisted by nature. From the top of the tower of the castle, which is of some height, we had a view of the surrounding country. The situation was flat, and the fauxbourgs had a poor and miserable appearance. The port will not admit ships that draw more than eight or ten feet water. of the merchants have become bankrupts, by the Emperor's prohibition of the exportation of timber, in which their trade principally consisted. Applications have been made.

CHAP.XIII. made, to export what has been already cut; but without success.

Russian mode of inflicting punishment on Deserters.

The day after our arrival at Wibourg, our curiosity got the better of our feelings, and we went to see the mode in which the Russians inflict punishment on their soldiers, for desertion. Five hundred men were drawn up, in three lines, forming two alleys, through which the deserter was to pass six times. A drummer preceded him, to prevent his walking too fast; and each soldier had a stick, with which he struck him. As soon as the punishment began, we turned another way; but were informed, afterwards, that it was more severe than we should have expected from the size of the sticks. Many soldiers desert into Swedish Finland; but they are frequently apprehended, in their attempts to reach the frontier, by the peasants; who are exasperated against them, on account of the robberies which they commit in their flight, for the purpose of supporting themselves. Five silver roubles are the reward for taking a deserter.

Inhabitants of IVibourg.

The inhabitants of Wibourg are partly Russians and partly Finns. The former are generally distinguished by their beards: in their dress, they have the appearance of Jews, a long loose coat being tied round the waist with a sash. The Finland girls wear their hair drawn together, and fastened at the back of the head with a little circular roll, and a pin stuck through it. The principal articles in request in this town, as luxuries, are, French brandy, sugar, wine, and coffee, all of which are very dear. The Finns, who bring corn and planks to Wibourg, return with salt. Here, and at Frederickshamm, we found the finest bread we had ever

tasted.

tasted. On inquiring the price of provisions, we were CHAP.XIII. informed that a sack of rye of nine *pouds* cost seven roubles; which is not higher than it was two or three years ago, though double or triple of what it was twenty or twenty-five years since.

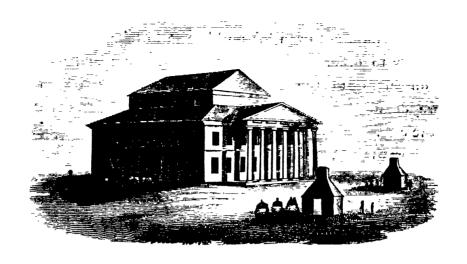
From Wibourg, we proceeded, through Konuta and Rorwer, to Pampola, a distance of sixty-two versts, over a flat country, passing through forests of fir and birch trees. Pampola is rather a large village: we observed the gable ends of the houses always turned towards the road: the only openings which were left for light were, one small window with glass, and two holes on each side without any; all placed at the same end of the house. At Bulostrof, thirty-eight versts distant from Pampola, we entered one of the peasant's cottages, a wretched abode quite black with smoke: the holes for light, on each side of the window, were not so much as a foot square. There appeared to be two families, consisting of two men, two women, and five or six children: the latter did not look so unhealthy as we might have expected from the extreme heat and dirt of the room. A bench, round two sides of the cottage, appeared to be the general sleeping-place. They expressed great surprise on our entering; and one of the women, on my offering to her a five-copeek piece, stared, and refused to take it. I then placed it on the table, where was some bread; of which they offered me a piece, in return for the money. The bread was of rye, dark-coloured, little baked, but had not a bad taste.

In going to *Drasnicof*, we passed through the same kind of country as before; but the firs were of larger size. The roads

CHAP.XIII. roads are made, in general, with small trees, thrown across, and covered with dirt and sand. When the trees are decayed, or recently laid down, the motion of the carriage is extremely rough and unpleasant.

Arrival at Petersburg.

The view of *Petersburg* presented itself to us at some distance before we arrived at the last barrier, where our passports were examined. We then entered a broad and perfectly straight avenue; the further extremity being terminated by the domes and palaces of the city.



CHAP. XIV.

PETERSBURG.

General appearance of the City—Novelty of the Scene exhibited in the Dresses and Figures of the Inhabitants—Expense in the mode of living among the Higher Ranks - Collections of Art, in the possession of Individuals—Amusements of the different Classes of Society—Ice-Hills -Visit to some of the Public Institutions -Academy of Sciences -Library attached to it-Museum-valuable Collections, in different branches of Natural History, preserved there-Peter the First-Academy of Fine Arts—nature of the Institution—Fortress—Tombs of the Imperial Family-Mint-Statue of Peter the First-defect of taste in the Artist-expense of the Work-Hermitage-Pictures - Hall of St. George-Palaces of Peterhof and Oranienbaum-State of the Peasantry-Mode of managing the Estates of the Russian Nobility—Checks to Population.

WE reached the first gate of Petersburg about eleven o'clock; CHAP.XIV. and were ordered by the sentinel to stop, and descend from our carriage. Our passports were presented, as usual;

but VOL. VI. 3 Q

chap. XIV. but he would not even lift up his arm to take them: it was contrary to order, he said, to receive them; and we must go ourselves to the officer upon guard; by whom we were detained half an hour, and then sent with a sentinel to the city. We approached it by its most beautiful quarter, crossing the Neva upon the ice, which was covered with sledges; and landed again opposite to the Marble Palace.

General appearance of the city.

The united magnificence of all the cities of Europe could but equal Petersburg. There is nothing little or mean, to offend the eye;—all is grand, extensive, large, and open. The streets, which are wide and straight, seem to consist entirely of palaces: the edifices are white, lofty, and regular. At first sight, the whole city appears to be built with stone; but on a nearer inspection, you find the walls are of brick, covered with plaister; yet every part is so clean and in such excellent order, and has an appearance so new, that the effect is as fine and striking as if they were formed of marble. The public structures, on whatever side you direct your attention—quays, piers, ramparts—are all composed of masses of solid granite¹, calculated to endure for ages. It seems as if the antient Etruscans or Egyptians—stimulated by emulation to surpass their prodigious works, aided by despotic power, and instructed by Grecian taste—had arisen, to astonish the modern world. Such is the metropolis which Catherine has left! Much had been done by her predecessors;

but

^{(1) &}quot;Les quais de la Neva et du magnifique Canal de Catherine sont construits de ce granit: les remparts de la fortresse en sont revêtus." Patrin. Histoire Naturelle des Minéraux, tome I. p. 96. The granite he alludes to is called Granit de l'Ingrie, which he describes, p. 95. He there states, that a colonnade in the Summer Garden is composed of more than sixty pillars of granite; each column being of one piece, twenty feet in length, and three feet in diameter.

but her labours surpassed them all: and our admiration is CHAP.XIV. increased, while we behold the magnificence of the buildings, the breadth of the streets, the squares, and openings, and noble palaces,—and recollect that a century has not yet elapsed, since the first stone of the foundation of the city was laid by Peter the Great.

We were told that we should find Petersburg like London. and that we should everywhere hear the language and see the manners of England; but nothing can be farther from the truth. This city presents to the stranger a sight as novel and interesting as any which he will meet with in Europe. In the general appearance of features and countenance, the Russians have nothing very characteristic; and when their beards are cut off, as is the case with those who live as servants in the families of Gentlemen, they could not be distinguished from Englishmen: but in the dresses of the people we are reminded of the inhabitants of some Asiatic towns; though perhaps in summer, when the robes, pelisses, and caps are not worn, the impression may be different. The resemblance to Asiatic customs and manners, perceptible in Moscow and Petersburg, will probably decrease, in proportion to the intercourse of the Russians with other parts of Europe. The stile of dress in the seventeenth century was more Oriental than it is at present: a robe was then in use called Feredja, which is a Turkish word?. At this season, the streets are filled with sledges; and with peasants in various costumes, having long beards, straight locks, bare necks, and their feet covered with shoes of the matted bark of trees.

With

⁽²⁾ In parts of *Petersburg*, the shops which sell the same articles adjoin each other, as in the Bazars of *Constantinople* and other cities of the *East*.

CHAP. XIV.

Expense in the mode of living among the higher ranks.

With respect to magnificence, Petersburg is as much superior to London, as London is to any provincial city in England; and the style and mode of living adopted by the Nobles exceeds all belief. The most distant provinces of the empire are explored, to furnish some delicacy for their entertainments: two, three, or even four hundred roubles are expended on particular dishes. At no season of the year are their tables without fruits of the rarest and most exquisite kind. Immense revenues are necessary, to support the prodigality and profusion exhibited by many of the Russians of the highest rank. The number of servants who are the vassals of the great land-owners amounts to two or three hundred; who supply, in various ways, by their different occupations, the wants, tastes, and demands of their masters1. The love and admiration of what is foreign, encourage many strangers to settle here, whose talents and ingenuity are constantly employed in furnishing and ornamenting the palaces of the Noblemen in the most sumptuous and splendid manner.

Collections of Art in the possession of individuals.

The collections of Art in the possession of individuals at *Petersburg*, as well as in *London*, were enriched by very valuable works, which, in consequence of the revolutions in parts of *Europe*, were dispersed over the Continent. Some of these we were allowed, by the kindness and hospitality of their owners, to examine; but they neither equal in extent or in real value those we have described, in another Part of this Work, as existing at *Moscow*. The Picture-gallery of Count *Strogonof* is a long room terminated by an enormous mirror,

^{(1) &}quot;I never put my hands into my purse for any thing," said a Russian Nobleman to a friend of the writer of this note, "but to purchase foreign wines, and articles for my wife's dress."—He was provided with every thing he wanted from his estate and his slaves.

mirror, which, sliding on one side, opens to the Library; and CHAP.XIV. beyond that is the Museum. Among the most remarkable paintings, we shall mention; 1. The Flight into Egypt, by Nicolas Poussin, the most brilliant work of that master. 2. A Centaur fighting with one of the Lapithæ, by Luca Giordano. 3. Les Pecheurs, by Teniers, a work much esteemed by connoisseurs. 4. A Philosopher, or Hermit, by Rembrandt, of great effect. 5. A Holy Family, by Schedoni, from the collection of Monsieur de Calonne. 6. Abraham. Sarah, and Hagar, by Dietrici. 7. The famous Claude, originally belonging to the Duchess of Kingston. singular, that, in rubbing this picture, a figure has appeared, which the painter had concealed. 8. The finest Portrait by Vandyke that perhaps ever proceeded from his hand. Vernet, standing for some time opposite to it, at Paris, at length exclaimed, "Parle donc!" There are also many good pictures by Spagnolet, Kuyp, and Berghami. In the Museum is a curious Plate of China porcelain; the outer varnish of which having worn off, a representation is seen of the Crucifixion, with these letters over the cross, 'INRI.' The Cabinet of Mineralogy contains very magnificent specimens, but without any order or classification. There is a whole cabinet of malachite: one piece, bought of Dr. Guthrie for a prodigious sum, is contained in a case by itself. The finest specimens are furnished by China and Siberia: the mine of Goumechefski formerly produced the best; but this mineral is now no longer found there2.

Count

Patrin. Histoire Naturelle des Minéraux, tome V. p. 97.

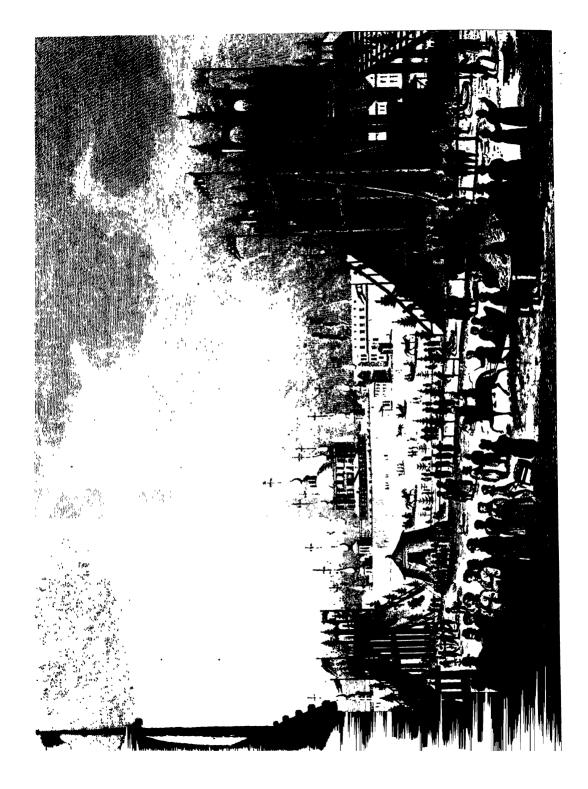
^{(2) &}quot;La mine de Goumechefski est à douze ou quinze lieues au sud-ouest d'Ekaterinbourg, dans la partie centrale de la chaîne des Monts Oural; c'est de toutes les mines connues celle qui a fourni les plus beaux morceaux en ce genre. Cette mine est dans une espèce de plaine, au bord d'un lac, et tout entourée de montagnes primitives."

CHAP. XIV.

Count Besberodko was engaged only four years in forming his collection; but spared no expense, during that time, to render it as complete as possible. We found there many pictures we had seen before in different parts of Europe. Among them is a most singular one, by Dietrici:—it is said there are others, at Dresden, executed in the same style: it possesses, instead of his laboured and finished manner, the wildness and boldness of Salvator Rosa .- 'JUDITH WITH THE HEAD OF HOLOFERNES,' I had seen at Venice: the drapery is green, but remarkably kept down. On approaching to examine the colours in detail, they will be found to consist of yellow, brown, black, white, and many other demi-tints. In addition to the excellent pictures by the Masters of the Lombard, Bolognese, and Venetian Schools, there is a whole cabinet of the best works of Vernet, containing views of the principal towns and harbours of Europe. The collection of antiquities is very great; and there is a magnificent room, planned by Guarenghi, and finished under his direction, furnished in the most splendid and costly manner. The Library of Baron Strogonof undoubtedly contains some valuable books; but many of the editions are modern: they are very splendid; and the owner seems in general to have paid more attention to finery and show than utility. We observed in it three. different copies of the French Encyclopédie.

Notices attached to the advertisements and bills of the Play-houses mark in a striking manner the character of the climate. They state, that if the cold is below 17 degrees there will be no representation at the Theatre'. The observa-

⁽¹⁾ The Vignette to this Chapter represents the Stone Theatre, as it appeared in 1801; with some of the Public Stoves.



observations are made on the scale of Reaumur; and there is CHAPLXIV. hardly a house, whatever be the rank of its owner, without a Amusement thermometer. The masquerades form part of the amusements ferent classes at this season. The first took place on a Sunday, at ten in the morning. At night, the Empress came, followed by the wives of the Grand-dukes Alexander and Constantine, and by all the Court. The dances began soon after her arrival. Madame Chevalier, the mistress of Koutizof the Emperor's favourite, seemed to occupy as much attention as the Empress herself. Another masquerade, on the following Tuesday, was much crowded, and there were more persons in character than in dominoes. The most interesting were a set of costumes of the different provinces of the empire.

of Society.

While the higher orders partake of the diversions of the season, the lower ranks are not without their festivities and sports. The frozen Neva presents a crowded and busy scene. In one part, booths are erected on the ice, where brandy and drams of every kind are sold: in another direction are pedlars, mountebanks, and jugglers, and the pastimes of Bartholomew Fair: in a different place are dramatic representations of a burlesque and ridiculous nature, to which the spectators are admitted for a few copeeks. The ice-hills afford an amuse- Ice-hills. ment to the populace, peculiar to the inhabitants of Russia. A scaffolding of wood is raised on the river, to the height of forty feet: from the summit, an inclined plane, having a steep descent, is covered with blocks of ice, firmly united together by water poured over them. The sides of the steps, or ladder, which lead by the back part of the scaffolding to the top, are decorated with fir-trees. The low sledge, resembling, in shape,

CHAP. XIV. shape, a butcher's tray, descends the hill with a rapidity sufficiently great to carry the person seated in it over a large tract of ice cleared of the snow, to an opposite scaffolding, constructed in a similar manner. Here he takes his sledge on his back, mounts the steps, and proceeds as before. Those who do not wish to descend alone, have a guide, who seats himself in the sledge as far back as he can. raising his legs at the same time: the other person is placed before him, and between his legs, in a similar position. The sledges, horses, and carriages, moving about in various directions, and the crowds of spectators who assemble to behold this amusement, present a very striking and animated scene.

Visit to some of the Public Institutions.

It is scarcely necessary to observe, that a city like Petersburg must possess many public Institutions — many monuments of art and industry, which afford to the stranger a constant subject of interest and instruction. quarter of the Capital is without them. Some account will now be given of those we visited, during our residence here.

Academy of Sciences.

The Academy of Sciences, founded by Peter the Great in

1724,

⁽¹⁾ This mode of descending is very well described in the Voyage de Deux François. "Le traineau consiste en une petite planche plus longue que large, et peu clevée: une seule personne peut s'y tenir, encore n'est elle point à son aise. Le conducteur du traineau est assis, les jambes ouvertes, entre lesquelles se place celui qui veut descendre. L'un et l'autre ont l'attention de tenir les jambes fort elevées, et le corps très en arriére: ainsi placés, et le traineau étant parfaitement droit, on le conduit au bord de la descente, et on le laisse aller : le conducteur le dirige. La rapidité de la course est prodigieuse: et le traineau arrivé sur le terrain plat, parcourt une assez grande étendue. Dans le premier moment la respiration est fort genée; il faut avoir l'attention de ne faire aucun mouvement d'un coté ou d'un autre; on seroit culbuté."

1724, has received donations and encouragement from all CHAP.XIV. the succeeding Sovereigns, and particularly Catherine the Second. The present revenue is from seventy to eighty thousand roubles. The Academicians are called Professors, and have salaries varying from eight hundred to fifteen hundred roubles. Some of them derive an income, in addition to their stipends, from places or offices connected with the Government: there are, however, others, who are not so fortunate; and, finding the salary, which was fixed at a time when the articles of life were at a lower price than they are now, insufficient to maintain them, become tutors and ushers in different seminaries. The four classes are those of Mathematics, Physics, Natural History, comprehending Chemistry and Anatomy, and Astronomy: and, on each of these subjects, lectures are given, at certain times of the year, in the Russian language. Among the distinguished members of the Academy, are found the names of Bayer, Gmelin, Euler, Müller, and Pallas.

The books of the Library amount, in number, to fifty Library thousand. We cannot expect to find in it the literary treasures which are the ornament of those of London, Paris, and Vienna: there are few Greek or Latin manuscripts; but there are many works, relating to the history of the country, of great value; and the collection of Chinese, Mongol, and Tangutian manuscripts is unique. In a gallery, were arranged the dresses of various nations; and waxen figures of the inhabitants, in their proper costumes—Persian, Chinese, Siberian, and Samoyede. The human countenance is here seen modified according to every possible form:

"long and round heads, flat and snub noses, hogs' eyes and vol. vi. 3 R calves'

CHAP. XIV. calves' eyes, bearded and unbearded chins, succeed each other, in grotesque variety."

Museum

The example of Peter the Great, who had expended large sums in procuring the most curious productions of nature and art to enrich the Museum, was followed by his successors, and by many of the nobles of the empire. Additions are constantly made to the Museum, by the Academicians who are travelling in the remote provinces of Russia, or in different parts of Europe. The treasures which it contains, relating to the mineral and vegetable kingdoms, are, perhaps, unrivalled. According to the account of Bachmeister, there are five hundred animals of different sizes, stuffed, or preserved in alcohol: there are also twelve hundred birds, stuffed: and the classes of amphibia, fishes, and insects, are very numerous. The Collection of Ruysch, containing the anatomical preparations of that great naturalist, was purchased by Peter the Great, in Holland, for thirty thousand florins.

Workshop of Peter the First. From the Library, we were introduced into a small chamber, which was the Workshop of Peter the First, filled with different carvings in ivory and copper, all executed by him, and generally representing sieges or battles. In the middle of the room was a large ivory lustre by the same hand; a number of medals struck on different occasions; and the battle of Pultowa in relief, on a large plate of copper. In a gilt box, at one end, is carefully preserved the Manuscript of Catherine, containing instructions for the new code of laws proposed by her: it is written in rather a large careless hand, partly in Russian, partly in French, and

forms a thin folio. In a small chamber within, is a figure CHAP.XIV. of Peter the First in wax, in his habit of ceremony. He appears to have been a large tall man; his height, marked against the door, being about six feet, six or seven inches. On each side of the figure are two cabinets filled with his clothes: in the first, is a blue coat lined with brown silk. and a hat with a hole made by a ball passing through it at Pultowa; in the other, his leather working-dress, and a pair of shoes which he had mended himself.

From this room we descended into two smaller ones, below stairs: in the first of which is a collection of fossils; and, in the other, of minerals, placed over the sides and ceilings, in the form of a grotto. Here we saw the immense piece of native iron found in Siberia by Professor Pallas, weighing forty pouds. There is also a curiously wrought cabinet, with an Apollo of solid gold on the top of it. In one of the rooms, we saw the idols, utensils, and weapons which had been discovered in the *Tahtarian* sepulchres.

In our visit to the Academy of the Fine Arts, we were Academy of accompanied by one of the élèves of the first class. informed us, that the pupils are divided into five classes: in the three lowest, Reading, Writing, German, French, and Geography,

^{(1) &}quot;Une masse de fer natif, pésant environ 60 myriagrammes, a été trouvee en Sibérie, près des Monts Kemir, entre Krasnoiarsk et Abakansk: elle étoit entièrement composée de fer métallique très blanc et très malléable, remplie de cavités sphériques, qui renfermoient une matière vitreuse, jaunâtre et transparente regardoient ce fer comme une pierre sacrée et tombeé du ciel." - Pallas.

[&]quot; Elle contient 0,981 de fer sur 0, 011 de nickel."—Klaproth.

CHAP.XIV. Geography, are taught; and in the other two, in which they remain six years, the arts of Engraving, Painting, and Sculpture. Those whom we saw at work were dressed in grey coats, and had a very neat appearance: the lower classes wear red. The proper number of pupils, when complete, is three hundred, each class containing sixty: and the list is now nearly full. The first room we entered was a handsome rotunda with pillars, ornamented, in the niches, with casts of statues, from the antique. We were then led into a very spacious room, eighty or ninety feet long, and thirty broad; in which, also, were some casts of statues, a few Italian paintings, and the portraits of the principal Patrons of the Society, and the most celebrated Academicians. In the centre was the portrait of the Emperor, and, on each side, his two sons. An allegorical picture, representing the late Empress, in the character of Minerva, had formerly been placed here, but was removed when Paul came to the throne. While he was Grand-duke, he had learned to draw at the Academy; and we were shewn the sketch of a head in chalk done by him; and some heads in wax, and drawings, by the present Princesses, very well executed. The Italian paintings did not appear to possess very great merit: the best among them represented Mars and Venus entangled in the net by Vulcan; but we could not learn the name of the artist.

> We next entered a long gallery, filled with casts from the most celebrated ancient statues; a collection very similar to one we had seen at Stockholm. The rooms that we afterwards saw were furnished with paintings of the different Italian Schools:

Schools; with some which were the works of the Members of CHAP. XIV. the Academy who had studied in Italy at the expense of the Society; and with prize-pictures of the élèves, previous to their quitting the Institution. There was an excellent cartoon by Mengs, from a Holy Family of Raphael. In one of the rooms was a model, in granite, of the rock which forms the pedestal of the famous statue of Peter; and a representation of the manner in which it was drawn to the water, rolling upon balls, in grooves. We saw many of the éléves at work, in painting and plaster. The building is extremely spacious, and all the rooms large and airy. We could not be admitted into the general dormitory, as it was locked; but that of the highest class, which we entered, was very neat and clean: each pupil has a separate bed, and there were four beds in each room. The building is of a square form; the front, towards the Neva, extremely handsome, with columns in the middle and at the two extremities; but the upper part is disfigured by a green cupola. Notwithstanding the support which is so liberally given to this Institution by the Government, few artists have hitherto risen to any great eminence. A slight degree of reflection will explain the cause of this. A taste for works of art is not yet diffused through the provinces of the empire: in Moscow and Petersburg alone are found individuals possessing great wealth, and actuated by a desire of encouraging native talent. But it is impossible that the numbers who quit the Academy can all find sufficient employment in these capitals. It is not from want of genius that so little has been done; but the

CHAP. XIV. the Russian painters, finding no motive to urge them to proceed in their profession, no stimulus to exertion, become indolent. and neglect the instructions which they have received. Many of the inferior artists are obliged to seek the means of a scanty livelihood by painting pictures¹ for the Churches.

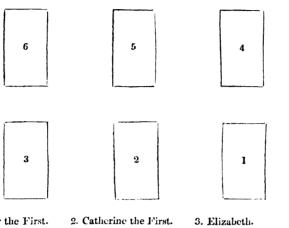
Unitress

We visited the Fortress, one of the most ancient structures of the city, built on an island of the Neva, according to a plan drawn by Peter the First. It is of brick, faced with granite. Here we saw the Church where the Sovereigns of the Empire, from the time of Peter the Great to the present period, are buried. The spire is graceful and lofty, being two hundred and fifty feet in height; but the inside of the church is distinguished by no peculiar architectural beauty. Nothing can be more simple, more devoid of all splendour, than the Tombs: they are of plain unornamented marble, with only an inscription containing the name of the person and the time of birth and death; a mode of burial which we must allow to be more suited than any other to the dignity of the character of those whose bodies they contain. were all covered with a velvet pall embroidered with silver. The Russians cross themselves before the tomb of Peter the First. Catherine herself lies not in greater state than any of her predecessors, nor in a manner different from that which belongs to any private gentleman in an English church-yard.

The

⁽¹⁾ Some of the artists of France dispose of their works in a similar manner Invisiting the public exhibition of paintings in the Louvre, in 1822, the writer of this note, on asking what became of the pictures of ordinary merit, of which the subjects were of a religious nature, was informed, that many were bought for the Churches.

The Tombs are on the right side of the altar, and arranged in CHAP. XIV. the following manner:



Tombs of the Imperial Family.

Mint

- 1. Peter the First.
- 4. Anne.
- 5. Peter the Third.
- 6. Catherine the Second.

The Mint, established in part of the Fortress, is worked by steam-engines. Ten thousand pouds of silver, and seventythree of gold, in ducats, had been coined this year for the Emperor's private use. A piece of mechanism, worked by the steam-engine, counted the number which were struck.

We have, in a former Part of these Travels, had occasion to mention circumstances illustrating the thievish and pilfering propensities of some of the Russian nobles. When they enter a shop, they carry away things in their muffs. A party having visited the Mint, had the meanness to purloin two ducats; and the poor slaves were forced to make good the loss.

The view of Petersburg, in descending from the Fortress, is one of the grandest and the most striking that can be conceived. We beheld a great part of the city extended before us; a series of noble buildings, domes, houses, reaching to the distance of four miles; the Admiralty, its Church, the Marble and Winter Palaces, and the Hermitage.

House of Peter the First.

In the quarter of St. Petersburg, we saw the House of Peter the First; a small wooden building, consisting only of three rooms; one of which was about fifteen feet square; the other, fifteen by twelve; and the third, not ten feet square. These, with a little passage as an entrance, made up the whole of the house, and formed a curious contrast to the magnificent palaces of the modern city.

His Statue:

On recrossing the Neva, we arrived at the colossal Statue erected by Catherine to the memory of the Founder of the Russian Empire. The merit of transporting the enormous mass of granite which serves as the pedestal of it, from the forest of Carelia to the water-side, and thence to the city, is entirely due to Count Carburi. Being placed on balls of brass fifteen inches in circumference, which rolled on sledges over a causeway raised for the purpose, it was moved every day, by four hundred men, with the assistance of pulleys and a windlass, over a space of ground equal to about half a mile. From the coast, it was brought, on a raft of a peculiar construction, to the city. The original size of the rock was thirty-six feet in length, twenty in height, and as many in breadth; but in forming it for the pedestal, a great part was cut off; and it was afterwards found necessary to add two pieces. The time of its erection is recorded by a simple inscription, in bronze, placed on one side:

PETRO PRIMO CATHERINA SECUNDA

1782.

The Russian Inscription, on the side facing the Admiralty, CHAP.XIV. has the same meaning. The statue is a master-piece of art, and reflects the highest credit on the talents and genius of Falconet, the sculptor. The Tsar, dressed simply, according to the national costume, is seated on horseback: his left hand holds the reins; the right is extended in a direction towards the Neva and the Fortress. The head, formed after a bust made by Mademoiselle de Collot, is crowned with a wreath of laurel. An appearance of stiffness in the right arm is the only defect in this admirable figure; but the statue of the horse is faultless; and nothing can exceed the fire and animation with which this noble animal is represented in the act of galloping towards the summit of the rock, and trampling on a serpent endeavouring to impede his course. The height is sixteen feet: that of the Tsar, ten feet. The model of the statue, in plaster, was exposed to public view for many years; but the statue itself was not allowed to be seen during the progress of the work. In the year 1782, when the whole was complete, the day of exhibiting it was commemorated in a striking and solemn manner. The Empress, attended by her Court, assisted at the ceremony; detachments of soldiers were drawn out, and placed round the statue; discharges of cannon were the signal for the removal of the scaffolding; medals of gold and silver were distributed on the occasion; and an ukase was issued, proclaiming pardon to all debtors of the Crown, under a certain sum. The rock having been diminished, and shaped according to the fancy and direction of the artist, has lost that bold and sublime appearance which it originally possessed. Cut and garnished, VOL. VI. 3 s

CHAP. XIV. garnished, what, in the present state, does the whole exhibit? a colossal figure of a man and horse, and a miniature representation of a mountain! A contradiction of this kind is absurd: it is the greatest violation of proportion that can exist. But the rock in its original state pretended to nothing: it was simply a rock, rude, and fashioned by the hand of Nature: and if it had been suffered to remain as Catherine certainly wished it should, untouched and unmutilated, nothing could have marked with more truth and propriety the character of the man in whose memory the work was raised, than a representation of the horse forcing its way and endeavouring to attain the summit. According to a calculation made by the Office for superintending the buildings of the city, the sum expended on the erection of this monument -including the cost of transporting the rock from its original site, the allowance to the artist who was engaged eight years in his labour, to the person who cast the statue, and to others who assisted in the inferior departments of the work—amounted to 424,600 roubles.

Hermitage.

1

Proceeding, in an easterly direction, from the spot where the statue is erected, we arrive at the Hermitage, a large pile of building connected with the Winter Palace. We first passed through a small but elegant Theatre, in which some persons were rehearsing a play: it was rather dark, but the columns round the semicircular part, where the audience sate, appeared to us to be of fine marble. After passing through three rooms, two of which are filled with pictures, we entered a most beautiful Gallery, said to be an exact representation of the Vatican. The copies of the Cartoons of

Raphael

Raphael were well executed. From this gallery we were led CHAP. XIV. into various suites of apartments, almost all ornamented with pictures. Those which formed part of the Houghton Collection, purchased by Catherine, were not arranged during her life-time: since her death, they have been hung up in the rooms of this palace; and many have been injured by the process of cleaning and varnishing, through which they have passed: some have fortunately remained untouched, and retain all their original beauty and character: among these, we may mention the Prodigal Son by Salvator Rosa, and the Holy Doctors of the Church1, the celebrated work of Guido. Some pictures by Murillo are in one of the saloons: in another, are a few admirable pieces by the two Wouvermanns: the collection is also adorned by some works of Nicolas and Gaspar Poussin, Claude Lorraine, Teniers, and Rembrandt, and a few portraits by Vandyke, executed in his best manner. In one of the glass cabinets we observed an aigrette of diamonds, presented to the late Empress by the Grand Signior.

The Hall of St. George, in a part of the palace adjoining Hall of St. the Hermitage, is a very magnificent room, about one hundred

(1) "In this picture, which is by Guido, in his brightest manner, and perfectly preserved, there are six old men as large as life; the expression, drawing, design, and colouring, wonderfully fine. The Doctors of the Church are consulting on the immaculateness of the Virgin, who is above in the clouds. After Sir Robert Walpole had bought this picture, and it was gone to Civita Vecchia to be shipped for England, Innocent XIII, then Pope, remanded it back, as being too fine to be suffered to go out of Rome; but on hearing who had bought it, he gave permission for its being sent away again."-Account of the Pictures at Houghton Hall, by Horace Walpole.

CHAP. XIV. hundred and thirty feet in length, and fifty in breadth. There are eighteen fluted Corinthian columns of fine marble, with gilded capitals, extending the length of the Hall; and six in breadth, placed with greater intervals, between every two: pilasters on the wall correspond to them. At one end is the throne, of crimson velvet and gold; the back and canopy ornamented with the Imperial arms: at the other end are two groupes of sculpture, by Falconet; one represents "Pygmalion admiring his own work;" the other, "Prometheus communicating fire to the image which he had formed." The figure of the woman in the first groupe, and the countenance and attitude of Pygmalion, are particularly excellent.

Palace of Peterhof.

On the southern shore of the Gulf of Cronstadt, and at twenty-five versts distance from the capital, stands, in a lofty and commanding situation, the Imperial Palace of Peterhof. It was built in the reign of Peter the First, and has received additions from different Sovereigns; and, consequently, presents various styles of architecture. We were shewn the Maison Hollandaise of that Emperor, a summer-house fitted up in the Dutch taste; a favourite spot, as from it he could behold Cronstadt and his fleet. In another part of the garden is a wooden house, having externally the appearance of a cottage, but furnished inside with a number of mirrors, and in a style of great magnificence. In the palace itself were ' many suites of apartments; some of them richly ornamented with gold. The bed-room of the Emperor was furnished in a very handsome manner: the bed was placed under a canopy; and near it, on a golden stand, was the glass-case for the crown, which the Emperor always takes with him.

first room into which we entered was fitted up with a CHAP. XIV. profusion of portraits of Russian Peasants, male and female, in their different costumes: many of them were exceedingly well executed, and represented some beautiful faces. Of the other apartments, those destined for the masquerades were the most remarkable for their size.

The Palace of Oranienbaum, distant a few versts further, Palace of Oranienbaum. had been presented by Paul to the Grand-duke Alexander: workmen were now engaged in fitting it up, for his residence; but it was not supposed that he would live much here. We were told that there was little worth seeing within. In the grounds adjoining, we were shewn a building of very elegant form, erected by Catherine the Second: some of the apartments were furnished with tables of beautiful work in mosaic, and good paintings in fresco. Many smaller buildings, that were formerly placed in different parts of the grounds, had been pulled down. Out of 4700 peasants attached to this place, two hundred and fifty were taken, in rotation, every week, to work about the grounds. The person who accompanied us, and who had the superintendence of them, informed us, that they were sometimes rather idle, and required a little beating. This he did not administer himself, but, when he thought it necessary, sent them to the soldiers. The peasants pay three roubles a-year, besides this contribution in kind: they also furnish horses and carts.

The peasants are slaves¹: these unfortunate people are sold, State of the Peasantry.

like

⁽¹⁾ A peasant may obtain his liberty, either by manumission, as in the instance of domestics; or by purchase; or by serving in the army or navy.

CHAP.XIV. like cattle in the market; and as much art and finesse are shewn by the nobles in disposing of them, as in the sale of their horses. If they are diseased, or infamous, or stupid, their faults and vices are concealed. They are often advertised in the Gazettes: and are let out on hire, or suffered to keep shops; their masters receiving the principal part of their gains. The price of a slave varies, according to circumstances: if he is a mechanic, an artisan, if he dresses hairin short, if he knows how to procure a little money, the price rises in proportion to his abilities. The children of slaves are also slaves. The treatment which such persons must sometimes experience in Russia may be well conceived. We had once, in Petersburg, the pain to witness, in the public streets, the punishment which a meagre effeminate coward thought proper to bestow on a man who might have crushed him with a grasp: but he was a slave! This contemptible tyrant, for no cause whatever that we could discover, was displaying his prowess, before a mob, by beating a peasant with a large bludgeon. The poor man bore the punishment without a groan or a tear, or even a word. His cowardly oppressor seemed to think he distinguished himself by the number of blows he gave; and became exasperated, because the object of his torture refused to shew, in any manner, that he felt the severity of the punishment. Unable to endure a spectacle so repugnant to the common feelings of humanity, and yet sensible of the danger of interfering in a species of iniquity protected and encouraged by the laws, we ventured, with great deference, to remonstrate, and to petition for the release of the peasant. "You know little," said his chastiser

to us, in French, " of this people: you have been so short a CHAP.XIV. time in this country, that you have not learned how to manage a Russian: if you do not flea the skin from his body, you will never have him in any order whatever."

There are, however, many proprietors in Russia whose general conduct to their peasants is directed by feelings of benevolence and kindness. The family of Prince Sheremetof have been remarkable, for some time, for the treatment of their slaves; many of whom are very rich, and not afraid to shew their wealth: their condition is, indeed, better than that of the peasants of the Crown. The Prince has 150,000; and receives, from each, five roubles a-year, as Capitationtax. As an illustration of the wealth possessed by many of this class of men, we were informed that the late Empress, wishing to obtain a supply, proposed to make a levy of one in five hundred; which, with the population of that time, of nine millions, would amount to eighteen thousand; declaring, however, that those who would pay five hundred roubles should be exempted. The levy was made in the usual manner; and fourteen thousand, out of the eighteen thousand, paid four hundred roubles. It is customary, on the different estates, for the peasants to go as soldiers; and a family generally knows when they will have to send a son. The only exception to this takes place when either the Seigneur or the neighbourhood are desirous of ridding themselves of some man of bad character.

. The peasants on the estates of the Russian noblemen are Mode of maallowed to manage the lands as they please, provided they pay Estates of the the Capitation-tax. This is different in different places; as lity.

Russan Nobi-

chap. XIV. much depends on the wants of the proprietor. The higher the rank, and the greater the wealth, the happier, for the most part, are his peasants. Few of the Russian noblemen farm their own estates: when they do, their lands produce more; but the situation of their peasants is rendered at once miserable. This is the case in Livonia and Poland, where some of the noblemen suffer their slaves to work for themselves only on Sunday.

There are some estates appropriated to particular branches of the Royal Family; and the peasants attached to them are considered to be in a better condition than those belonging to individuals. There are peasants, but not many, who may be said to possess land of their own; and these are chiefly the families of noblemen reduced to poverty, who have been permitted to enter into the class of vassals, and have had lands given to them by the Crown, which they hold under a particular tenure. On every estate, whether it belongs to the Crown or to an individual, a new enumeration and a new division of lands takes place every ten or twelve years. A family that loses any male children during the interval pays for them until the next enumeration. Forty acres is the common portion of land allotted; but the quantity depends on the size of the family, or what they are thought able to cultivate, and on the plenty or scarcity of land on the estate. The tax is like a rent; and the Seigneur in general does not trouble himself in what manner it is earned, whether by cultivating the farm, or leaving it, and working in a town: for the latter, however, permission is required. Many of the arrangements, relating to the division of the lands and internal regulations, are settled by the peasants themselves,

the Elders of the village. When an estate is overpeopled, CHAPANIV. which, however, does not often happen, the peasants are sometimes transported to another place, and formed into a new colony. The brother of the Baroness Strogonof had an estate where the population was too great for the quantity of land; but no inconvenience arose from it, as he received a certain capitation-tax, and allowed his peasants to go and earn it where they pleased. This was the method he pursued in general; and therefore never gave himself any trouble, whether they cultivated the land that was allotted to them, or "Cela m'est égal: cela me fait ni bien, ni mal!"

Early marriages are encouraged by the Seigneurs. principal checks to population are, the recruiting service—the Checks to numbers lost before they join the army—the debauchery of the large villages—the custom of drinking great quantities of brandy¹—the small-pox, and other epidemic diseases. Scarcities do not often occur, though there have been partial ones. The price of labour was between eighty copeeks and a rouble a-day. Brandy was so cheap, that a man could completely intoxicate

(1) The result of the inquiries made relating to marriages, births, and deaths, is published occasionally by the Academicians, in their Memoirs. According to the observations of Professor Kraft, the mortality between the ages of twenty and twenty-five is very great. From 1764 to 1780, out of 47,538 males, and 26,899 females, there died, between the ages of fifteen and twenty, 364 males, and 670 females; but between the ages of twenty-one and twenty-five, 14,752 men, and 973 women.—Storch states the mortality between the ages of twenty and sixty to be very great: "Neither by the bodily frame, nor the climate, is this to be explained; since both are favourable to life, as the periods till the fifteenth year sufficiently prove. Nothing, therefore, but the mode of living can account for this political calamity." He then mentions the cause, which was stated to us, among other circumstances, as affecting the population. "No other cause remains that we can accuse of this terrible effect, than brandy." p. 94.—See also Tooke's Russian Empire, vol. II. p. 156.

CHAP. XIV. intoxicate himself for eight copeeks. The price of labour had been trebled during the last twenty or thirty years; and that of brandy had not been raised more than a third. The population of the city, according to a recent census, amounted to 200,000 persons, including the strangers; a calculation which places Petersburg after London, Paris, Vienna, and Naples. It was difficult, however, to obtain an accurate estimate; as some thousand workmen-bricklayers, masons, and labourers of various classes—come to the city in spring and summer, and quit it in autumn. Of the foreigners resident here, the Germans are the most numerous. The trades which contribute to luxury, ornament, and fashion, as well as those of general use, are carried on by them. Next to these, we may place the French; who follow, among other employments, those of cooks, hair-dressers, watch-makers, and milliners.



CHAP. XV.

PETERSBURG.

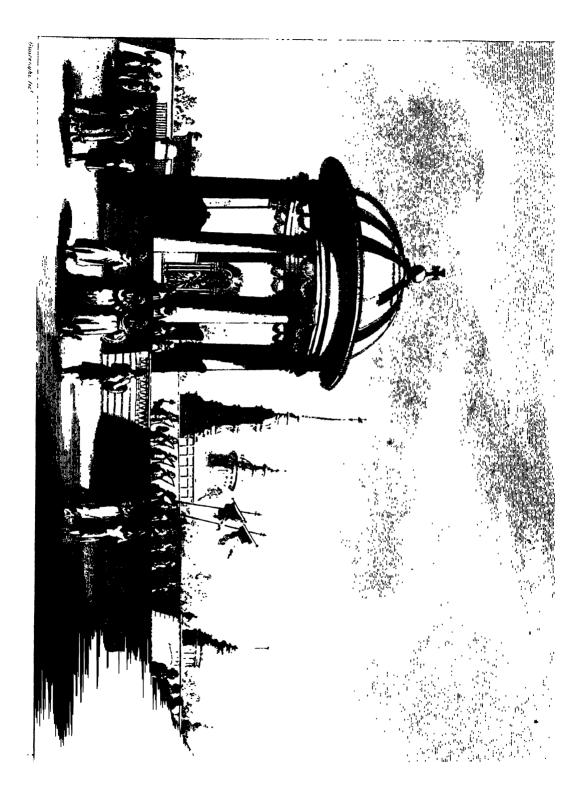
Benediction of the Waters of the Neva-Monastery of St. Alexander Nevsky-Religious Festival in honour of that Saint-Tombs-Church of St. Nicholas-Glass-house established by Potemkinnature of the works carried on there - Foundling Hospital description of it-state of the Children-mortality which prevails amongst them-encouragement given to licentiousness by the Institution-Character, temper, and disposition of PAUL, before his accession to the throne-Disrespect and insult shewn by him to the memory of CATHERINE, on his becoming Emperor-Anecdotes illustrating his extraordinary conduct-Remarks on the character of the Empress CATHERINE—Deposition and murder of PETER THE THIRD.

So much has been said in other works respecting the religious CHAP. XV. rites and usages of the Greek Church, that little need be introduced in this place on the subject. We shall only mention those objects worthy of attention, noticed by us in the

Benediction of the waters of the Neva.

CHAP. XV. course of our visits to some of the churches; and the annual ceremony of the Benediction of the waters of the Neva. The last takes place on the sixth of January (O.S.), and was formerly celebrated, with great splendour and magnificence, on the river. At present, a small Temple, of an octagon form, made of wood, painted and adorned with crosses and pictures representing parts of the history of John the Baptist, is erected on the Admiralty Canal: an inclosure is formed around it, and within is a hole cut in the ice. A platform, covered with scarlet cloth, leads from the Palace to the Temple; along which the procession advances, consisting of the Archbishop, accompanied by Bishops and Dignitaries of the Church, the Imperial Family, and persons attached to the Court. Having arrived at the Temple, different prayers are recited1: after which, the Archbishop descends a ladder placed within the octagon building, and dips the cross thrice in the water; the benediction being pronounced at the same time. Some of the water is then taken up in a vessel, and sprinkled on The military, with their the surrounding spectators. standards, the religious orders in their different dresses, the presence of the Imperial Family, and the crowds of people assembled together, form a very striking scene. The last occasion on which Peter the Great appeared in public, was at the celebration of this ceremony. He was previously indisposed; a severe cold attacked him on the day of the Benediction of the waters, increased his disorder, and in a short time brought on his death. At the celebration of a ceremony

⁽¹⁾ The prayers used on this occasion are given by Dr. King, in his account of the Greek Church, p. 384.



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ceremony of the same kind, which was instituted in the CHAPLY V. early period of the empire, at Moscow, an image of the Holy Virgin was plunged into the river; the water was blessed by the Patriarch; and the Tsar, and the persons of the Court who were present, were sprinkled² with it.

The Monastery of St Alexander Nevsky is situate on the Monastery of left bank of the Neva, at the distance of four versts from the Nevaly. Admiralty, in a south-east direction: it was built by Peter the Great, in order to receive the remains of one of his ancestors which were brought from the Convent of Godoretch in 1724. When we visited this monastery, the priests were performing the service in a small chapel, and not in the great church. After the singing, a sermon was read, in rather a fast and vulgar voice: at intervals, the people bowed and crossed themselves, some touching the ground with their foreheads. We observed, in general, that the women shewed the most, and the Monks the least devotion. The latter were dressed in black stuff or camlet, with a high cap, and a black crape yeil over it. After the service, we went into the great Church; where we remarked three Monks before the Shrine of St. Alexander, saying a mass for a particular person who was standing near them. The prayers were read by one, in a singing tone; and the two others joined at intervals, and made responses, taking a second or tenor at a particular part of the service. The head of the devotee was covered, for some time, with the mantle of the reader, and the book placed upon it: the person then kissed the book

(2) " Toute la journée on se rendait alors sur la glace: on y faisait des trous: le Patriarche bénissait l'eau pour toute l'année, y enfonçait l'image de la Sainte Vierge, et aspergeait le Tsar et les Courtisans."-Histoire de Russie, par Levesque, tom. IV. Note par Depping, p. 130.

CHAP. XV. book and the hand of the priest, paid his devotions to the shrine, gave a certain number of copeeks, and retired. We observed others, afterwards, apparently negotiating for a mass at a certain price, and sometimes unsuccessfully. A gentleman with a cockade, accompanied by a servant in a silver-laced hat, seemed to be more fortunate, and had a mass said, and some water blessed for him. The latter part of the ceremony was so long, that we did not stay to see the conclusion; but were. told, that he either carried the water home, or left it with the Monks, to be added to that which was already consecrated. He did not appear to go through his in the church. part with much devotion; and instead of bowing his forehead to the earth, in general only touched it with his hand. He afterwards, however, knelt down once or twice, and kissed the shrine. While they were saying the masses, many people came and paid their devotions to the shrine; always putting some money, at the same time, in a little box placed there for the purpose. The shrine is very handsome: religious emblems of various kinds, candelabra, reliques from Palestine, and a pall adorned with gold and jewels, form part of its decorations. The silver in it is said to weigh eighty pouds and eight pounds; or 3208 pounds1.

We

⁽¹⁾ We were not in Petersburg at the time of the year when the great Festival occurs in honour of the Saint to whom the Monastery is dedicated. The author is indebted to a friend for permission to transcribe from his Journal the following account of what he observed on that occasion.

[&]quot;When we reached, with some difficulty, the Church, we found that the procession of Priests had arrived before us, and the service was begun. read in a chanting tone, and frequently interrupted by singing. bowed, and crossed themselves, for some minutes. We were near the Shrine of the Saint, which was of massive silver, and very handsome. Many waxen tapers were burning before it: some were brought by the devotees themselves, who also handed up money, which, we understood, was for the purpose of contributing to the expense of

We afterwards went into another church belonging to the Convent, in which were some fine monuments: we observed particularly those of Count Panin, Prince Galitzin, Count Besberodko; and a very handsome one of Narishkin.

Over the tomb of Besberodko, a lamp was to be kept always burning before a small figure of Christ; and in an adjoining room was a rich crimson velvet and gold baldachin, under which was the body lying in state. In a room above stairs was a very good picture representing the Baptism of the Wife of the Grand-duke Alexander, previously to her marriage. It was the work of a slave who attended at the ceremony; and was presented to the Empress, for the Hermitage. She purchased his freedom, and gave him one thousand roubles.

the lights. All that were able to approach the Shrine, kissed it; having made, previously, several prostrations and bows. Every body around appeared very devout: 1 lost, notwithstanding, my pocket-handkerchief. After a short time, we met with a Russian Gentleman, who spoke English, and took us under his protection; and by his assistance we obtained a much better situation. Before the Communion-table were folding-doors, having open work of gold, and ornamented with circular paintings: immediately behind was a veil or curtain, which, when the Priests retired to receive the Sacrament, was drawn across the open-work, and the place was kept sacred from the eyes and observation of all. After the usual service was performed, as it was the name-day of the Grandduke Alexander, the Bishops, six in number, with the Metropolitan at their head, walked to the Shrine, and prayers were offered up for all the Royal Family, and for the Grand-duke in particular. The Bible presented by the late Empress, the covers of which were of gold, and on one side most richly set with brilliants, amethysts, and other precious stones, was brought to the Shrine: the Metropolitan, having taken his mitre from his head, read from it. As he was rather infirm, the Bishop of Casan had performed the greatest part of the service. Six Bishops stood before the Shrine, most splendidly arrayed, their mitres covered with pearls and other ornaments: at the extremity of the line was the Greek Bishop, Eugenius, who appeared very old, and scarcely able to support himself. The Abbots who assisted in the ceremonies were dressed in robes of crimson velvet embroidered with gold. When the service was over, the Metropolitan, followed by the other Bishops, returned to the Communion-table. He was supported by two of the Abbots and a page; and, as he walked, all the people who were near,

CHAP. XV.

An holas.

The style and manner of painting adopted in the pictures with which the Russian churches are frequently ornamented have been described in the former part of this work. Church of St. Church of St. Nicholas, called also L'Eglise des Matelots, are many pictures of Christ and the Virgin Mary, studded with real or false gems: the glories of gold have the appearance of .gilded horse-shoes; and when many of them are seen together, in the same piece, produce a singular effect. inside of the building is roofed quite low; and we were told that there was another church above. We observed the same arrangement in that of St. Vladimir; where the lower church is used in winter, and the upper in summer.

Class-house established by Potentin.

We afterwards went to the Glass-house established by Prince Potemkin; where plate-glass of an extraordinary size is cast. The person who superintended the business

was

among whom were some of the principal Nobility, crowded round him, to kiss his hands. The Bishop of Casan received the same mark of homage; but less respect was shewn to the rest; and Eugenius, the most venerable of all, from his great age, had no Abbot to support him in his tottering walk, nor did any persons offer to kiss his hand. When the Bishops had left the Shrine, the people crowded round it in great numbers, to pay their devotions, and kiss it. We were happy in having an opportunity of seeing all the countrypeople in their best apparel; and were quite astonished at the rich dresses of some of the females, who, we were informed, were either peasants or bourgeoises. The head-dress was, in general, a kind of turban, with a deep gold lace round the forchead; and a very large silk handkerchief, worked with gold and silver, falling from the top of the turban, down to the waist behind, and sometimes brought round before, like a cloak. Under this was a silk vest, meeting over the breast, and reaching some way below the waist; and under that, a petticoat. Many of the vests and petticoats were of the richest silk, worked with gold and silver. The upper part of the turban, when not covered by an handkerchief, was generally of velvet, flowered with gold. These dresses reminded me very much of some representations of those worn by Greek women, and were certainly not like any thing we had seen in the northern parts of Europe. The bourgeoises of the city appeared generally in old-fashioned silk jackets and petticoats, with high head-dresses of silk handkerchiefs tied in the shape of turbans. All the peasants, and lower classes of citizens, wore their beards."

was sent by Potemkin to England, for some years, to learn CHAP. XV. the art. Having seen the different houses where the earlier parts of the process were going forwards, we were taken to that part of the building where the quicksilver is laid on, and there saw a glass supposed to be the largest that was ever made. The length was 165 inches; the breadth, eighty-nine; and intended for one of the rooms in the Winter-Palace. The breadth occasions the greatest difficulty to the workmen. The price of it was 15,000 roubles. The immense copperplate on which it was cast was made at Petersburg, for 20,000 roubles. Prince Potemkin applied, at first, to the manufactory at Paris, and was asked 20,000 roubles for the work alone, without the expense of the copper. The weight is one thousand pouds, or 40,000 pounds. At the death of the Prince, the manufactory was taken by the Crown, but is supposed now not to pay much more than the expenses. The workmen had all a clean and comfortable appearance: they are slaves attached to the manufactory, which is the case in many other establishments: they here, however, receive pay, in proportion to the quantity of work executed. We were informed that the Crown seldom takes the labour of its peasants in kind: hired labourers are engaged in most of the public-works.

The Foundling Hospital, established by Catherine the Foundling Hospital, Second, in the vicinity of the Convent of Voskresenski, but removed afterwards to the first quarter of the Admiralty, is a branch of the great institution at Moscow, also founded by her. The house is a handsome extensive building by the Moika Canal, which had belonged to a nobleman. The

CHAP. XV. rooms are large, airy, and even elegant; and are kept apparently with great neatness and cleanliness. We were first introduced to that part where the boys were dining, in number, as we were told, about 180: they were dressed in red, blue, and brown, according to their classes. They were eating meat, with which they were constantly supplied, except on fast-days. The table-cloth was clean; and each had a separate napkin: there was no disagreeable smell in the room; and the provisions appeared to be so good, that we could have sate down, and partaken of their fare with pleasure. We then walked over different rooms, in which we saw much machinery; but as it was a holiday, no one was at work. The boys are taught all kinds of trades: they learn to be tailors, to weave, to make shoes and stockings; and each trade had a separate room appropriated to it. What is not used in the house, is sold; but the profits do not go far in support of the establishment. In the magazine-rooms, there were some tolerable pieces of manufactured goods, but not much in quantity. We were next introduced to the Dormitory: the bedsteads are of iron; the beds are composed of straw paillasses, but have no testers nor curtains: they are at four or five feet distance from each other; and there was a separate one for each boy. We were then conducted to the apartments appropriated to the young children, where we observed the same neatness we had remarked in the dormitory. All women who present themselves to the Lying-in-Hospital connected with this institution, for the purpose of being taken into the house and delivered, are received, and . no questions are asked; but they cannot take their children

away, when they quit it. An application was once made to CHAP. XV. the Empress in favour of a person of some quality, and granted. The children that are brought to the door in baskets are, after three days, sent into the country, to the wives of Ingrian and Finnish peasants, at the rate of two roubles a month: they return when they are six or seven years old, and are then fit to be taught some trade. The number in the country belonging to the establishment is six or seven thousand. All the children that are brought are received, without any limit. The average number admitted in the day is about ten. We were there at noon-time, and saw four who had just been received: one of them appeared to be dying. We could not learn the average number of infants in the house; but thought, from our conductor's information, that it was seven or eight hundred. We were surprised at the great mortality that takes place: one hundred deaths in a month form the common average of the whole house; and in the preceding winter, there occurred, not unfrequently, eighteen in a day. The mortality chiefly occurs, it may be supposed, among very young children; some of whom are brought when they are actually dying: but there is a considerable number of deaths among those who are older.

Having quitted these apartments, we went over those allotted

to

Arridens nudis infantibus: hos fovet omnes,
Involvitque sinu."

Rem

⁽¹⁾ Mr. Forsyth makes an ingenious and happy application of a passage in Juvenal to the Hospital at Florence, in which legitimate and illegitimate children are received. As they are admitted at night, he proposes that the following words should be written over the grate:

CHAP. XV. to the girls. The dormitories and work-rooms were kept in the same neat manner. There are five classes: the two highest make lace, and embroider very well: we saw a saddlecloth of yellow velvet most richly embroidered in silver, which was to be presented to the Emperor on his birth-day. The Empress interested herself particularly in the institution; and, when she was in the city, seldom passed a week without coming twice or thrice, and looking into all the details of the management of it. We were told that the expenses of the establishment amounted to 100,000 roubles a month. The regular revenues belonging to it are not in any degree equal to that sum; but the Government takes upon itself the direction of the whole, and consequently bears the additional expenses.

> The common hours of working are from six to twelve, and from two to four. There was a large garden, for the girls to walk in; and a separate piece of ground for the boys, where they went after dinner to play, as it was a fête: the girls amused themselves with sewing and embroidery. Notwithstanding the advantages possessed by the place, and the cleanliness that appeared to prevail in general, the children had not a healthy appearance; and we were quite surprised at the very small number of good-looking boys and girls which we saw. The greater part were absolutely ugly; and all had sore eyes. This complaint arises, probably, from the strong light and white walls, added to the offensive heat of the rooms and the reflexion from the snow: it originally begins in the smoky cottages where the children are sent to be nursed. One of the governesses complained to us of the frequency of holidays

holidays, as a great interruption to the employments of the CHAP. XV. children. The girls leave the house at the age of eighteen, and the boys at that of twenty or twenty-one. Sometimes those children who were sent into the country did not return: this depended on the room there was in the house, and on the will of the Empress. There is a large hall, with a railing, where the parents come and see their children; to whom they affix a mark when they deliver them; giving, at the same time, a, note, stating whether the child has been baptized or not, and what is, or what should be, the name. Parents, in proving themselves able to support their children, and, we believe, on paying the past expenses, may demand them, and take them away, if they have not been born in the house. They may always find the children, by asking for the particular number, received on placing them in the institution.

The greatest praise has been bestowed by some Writers on the institution of the Foundling Hospitals of Petersburg and Moscow. "The genius of Catherine made even the vices of a portion of her subjects contribute to the wisdom of her views. Those unfortunate children, whom their fathers disowned—whom their mothers did not dare to acknowledge—were abandoned to public compassion, and often to death. Equally rejected by nature and by the law, they have been adopted by the Sovereign. No establishment of the kind can be compared with the Hospital at Moscow. All who present themselves there, or are brought from the different depôts of the empire, are received. Their first

CHAP. XV. years are watched with the utmost attention; and this, if possible, is increased in the superintendence of their education. They are instructed, according to their inclinations or natural dispositions, in different trades and different arts. When the term of their education has expired, they receive the greatest of all blessings-liberty. Restored to their country, they are dependent only on the laws; and in consecrating to their country the talents which she has bestowed upon them, they give back even more than they have received." Such is the eulogy pronounced on these institutions by one of the historians of the Russian empire: nor can it be denied that many useful and industrious citizens have been formed in them. It may however be questioned, whether they really increase the population of the empire to the extent which some have supposed. No doubt can be entertained as to the encouragement of immorality and licentiousness which they afford; since to have an illegitimate child, is considered as the least fault which a female-servant can commit⁸.

> The conduct of the Emperor was, at this time, the chief subject of conversation at all the tables to which we were invited, during our stay at Petersburg; both in the houses

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⁽¹⁾ Histoire de Russie, par Levesque, tome VI. p. 55.

⁽²⁾ A female servant belonging to a mistress of rather strict character sent six children to the Foundling Hospital, without losing her place. Her accouchement, we were informed, seldom obliged her to absent herself more than three days.

of strangers, and of the Russians themselves. We had not, CHAP. XV. indeed, been long in the city, before we heard, from undoubted authority, numerous examples, many of which the Emperor were confirmed by our own observation, of the folly and inconsistency, cruelty and obstinacy, caprice and idiotism, not to say insanity, of Paul. Before his accession to the throne, he had frequently displayed great eccentricity and absurdity in his conduct. A mania for every thing military particularly possessed him: he would harass the soldiers of his regiment with the most vexatious discipline, the most minute and frivolous attention to every part of their dress, even to the shouldering of a musket, and to the buttoning of a coat. He once shut his wife up in a fortified place; and ordered a mock-battle to be fought, pretending to take on himself the defence of it against the attack of the supposed enemy. Nothing offended him more than the refusal of Catherine to allow him to command the Russian army, in the campaign against the Porte in 1787. In visiting different parts of the Continent in 1781, in company with the Grand-duchess, he was everywhere received with the greatest attention and honour; but nothing could remove the gravity, silence, and reserve of his manner. He frequently shewed great distrust and suspicion of those around him: this was particularly observable during an illness with which he was attacked in Italy. His conduct on that occasion has been explained, by the circumstance of his being impressed with a notion that Catherine wished to make an attempt upon his life. On becoming Emperor, he was at liberty to indulge, to any excess, and in any manner

he

CHAP. XV. he pleased, his military folly. Every morning was devoted to reviews, to the parade, and to the practice of various manœuvres. As Frederick the Great was the principal object of his admiration, he ordered the national dress of the Russians to be exchanged for the Prussian uniform. He soon began to shew disrespect and aversion to the memory of his mother. The plans she had formed were altered: the ministers, whom she had selected for their talents, were disgraced; the buildings she had commenced were completed in any manner but that which accorded with her ideas. The Church of St. Isaac had been raised to a considerable height: marble, jasper, porphyry, and granite, were the materials employed in the construction of it: Paul finished it with brick. The Taurida Palace was converted by him into barracks. Peter the Third, his father, had been buried in the Church of St. Alexander Nevsky: Paul

Paul

The assas-

ordered the body to be removed, and deposited in that of the

sins of *Peter* were dead, with the exception of two,—Orlof and Boriatinsky: they were commanded to be present at the ceremony, to attend the body as chief-mourners, and to remain near it for the space of three weeks. This act of

Fortress, where all his ancestors are entombed.

⁽¹⁾ He ordered some models of tails to be made, which he intended should be worn by the officers and soldiers; and despatched them to different corps of the army. Souwarof, on receiving a packet of these tails, shook his head, and exclaimed, "These tails are not bayonets; and no fire will come from this powder." A translation cannot give the spirit of the original, which has a rhythm, and metrical cadence, often used by Souwarof in his conversation. "Kaçoi nè kalot, bouklai nè palit, poudrei nè streliat."—M. Depping quotes this, from an historical memoir relating to Souwarof.

Paul was viewed in different lights: by some he was CHAP XV. considered as influenced by motives of respect and affection to the memoral his father; by others, the whole transaction was considered as a censure and reproach of the conduct of his mother.

At the time of our residence in *Petersburg*, the chief favourite of *Paul* was *Koutizof*², originally a *Greek* slave, and latterly his valet de chambre. This man had a mistress,

Madame

(2) Since the period when Dr. CLARKE'S Manuscript Journals were written, an edition of Levesque's History of Russia has been published, with Notes by MM. Malte-Brun and Depping. The latter has added an account of the reign of PAUL; and has related in it many anecdotes, marking in a striking manner the absurdity and folly of his conduct, precisely of a similar nature to those which Dr. CLARKE had already noted in his Journal. This coincidence confirms the accuracy of the statements both of the English Traveller and the French Historian.

M. Depping says, that Koutizof was originally a Turk: but the passage is suffered to stand in the text, as it occurs in Dr. CLARKE's manuscript. M. Depping gives an anecdote very characteristic of Souwarof, which illustrates at the same time the history of the rise of Koutizof. "From valet de chambre, he became the confidant and mainister of Paul; and although he was detested by the nobles, they all sought his favour. Souwarof alone, more accustomed to the language of camps than to that of Courts, refused to bend the knee before the second master of the empire; and humbled him, on one occasion, in the most marked manner. On his return from exile, Paul sent his favourite to him. "Count Koutizof" was announced. "Koutizof!" cried the General: "I do not know any Russian family of that name." The Count answered, that he was from Turkey, and that the favour of the Emperor had raised him to his present dignity...." You have then doubtless distinguished yourself in arms?" ""I have never served."-"Or in the ministry?" "I have never been in any civil office. I have always been about the person of the Emperor."-" In what capacity?"-Koutivof wished to turn the conversation; but Souwarof mercilessly pursued him with questions; until he confessed that he had been valet de chambre. Souwarof, on this, turning to his servant, said: "You see, Ivan, what it is to conduct yourself well. This gentleman was, once, what you are: behold him Count now, with the blue ribband!"

actress at the French Theatre. Her uncommon beauty had subdued Koutizof; and, as he governed Paul, Madame Chevalier's influence was unbounded. Whoever became the object of her hatred, or of that of the favourite, was immediately sent into exile. Within a few days after our arrival, not less than one hundred and fifty persons were banished, and not one under the smallest pretence of justice. We found, in consequence of the tyranny and caprice of the Emperor, that many noblemen were leaving the city, and retiring to Moscow. As Paul had a particular aversion to all

strangers, every one who shewed them any kindness, or treated them with hospitality, became immediately offensive to him.

The Emperor rose every morning at five: Koutizof, whose apartments were under his, saw him first: the report of the head-officer of the Police was received shortly afterwards. Paul's chief vanity was, to shew his insensibility to cold: for this purpose, he drove about in an open sledge, or rode on horseback without a pelisse, parading before his soldiers, and through the streets, with his hat off, for twenty minutes together. When he passed, every person must stop, and stand bare-headed; every one descended from his carriage, however thinly he might be clothed, and whatever might be the state of the weather. Ladies, old women, infirm and sickly persons, were obliged to suffer these indignities. The same marks of respect were shewn to every part of the Royal Family, even to the Infants; but when the Grand-duke Alexander passed, he always hurried by, and waved his hand, to prevent this painful homage. His amiable character and condecondescension rendered him the idol of the people; and he CHAP XV. was as much loved, as Paul was detested.

We passed an evening at the hospitable and elegant mansion of Baron Strogonof; who informed us, that his coachman, one morning, when the Emperor was riding through the streets, did not stop the horses so quickly as he ought to have done: on this, the attendant officer went up, demanded who was in the carriage, and took down the name of the Fortunately, the Baron was going to his uncle, a favourite of the Emperor, and no more notice was taken of the matter; but he told us he passed a day of painful anxiety. The slightest punishment inflicted for neglecting to take off immediately your hat, great coat, cloak, gloves, or pelisse, as the Emperor passed by, or for not descending instantly from your carriage, in the snow, mud, or rain, was, that the servants were bound and sent to the army, the horses to the artillery, the carriage confiscated, and the master ordered into confinement. The attention of the police was directed to things of the most insignificant kind: if a man had his hair short on the top of his head, if it fell over his forehead, if he had any below his temples or on his cheeks, a soldier was sent to shave him, or cut his bair, according to the whim or taste of the police-officer. As every thing was regulated by the caprice and insolence of this class of persons, it was impossible in any way to escape their notice and inter-Friends met with suspicious and fearful looks, asking for news, or mentioning the misfortunes which had happened to their relatives, who had been exiled or ruined

⁽¹⁾ La colère de Paul frappait indistinctement toutes les classes de la société ;--les courtisans, les gens de lettres, les militaires, les marchands, les femmes, tous encou-

CHAP, XV. by the Emperor and his minion. While we were at Baron Strogonof's, a Princess came to take leave of her friends:she was ordered to leave Petersburg by four o'clock in the morning.

> An Englishman, accustomed from his infancy to the blessings of a free constitution, is in the practice of declaring his sentiments openly and loudly. In Petersburg, if he opened his mouth, though for the sake of asking a question of the most indifferent kind, his Russian friend trembled while he was addressed.—" What architect designed that palace?" "Speak lower, for God's sake!"-"What! is it prohibited to ask questions relating to architecture?" "Every thing is prohibited."—"Is it prohibited to speak, to breathe, to exist?" "It is dangerous to speak at all: whatever you say, may be misinterpreted; and, surrounded as you are, the less consciousness you afford even of your respiration or existence, the better."—This is a real statement of a conversation which took place. It was an offence to be loud in talking, laughing, or singing. Peace and comfort, innocent mirth, and domestic happiness, were constantly interrupted; and the effect of a baneful and malignant tyranny was everywhere experienced; adempto per inquisitiones, et loquendi audiendique commercio.

> The Emperor ordered a person to be flogged by the soldiers, because he wore his cravat a little too near his chin,

> > . and

raient la peine de l'exil, ou du knout, pour des fautes légères Les exils et les arrestations continuaient toujours: on voyait sur les routes de nombreux kibithus, qui transportaient les prisonniers en Sibérie. Ces transports se faisaient avec la plus grande précipitation; on ne laissait souvent à l'exilé qu'une heure pour arranger ses affaires; et puis on l'envoyait sous le climat rigoureux de la Sibérie, sans lui accorder les moyens de se prémunir contre la rigueur du froid."

and had not placed the cock of his hat straight over his fore- CHAP. XV. head. The punishment was inflicted with severity. On one occasion he had the audacity to cane an officer: the unfortunate victim of his cowardice retired to his house, and shot himself, leaving a note for the Emperor, containing these words: "He who has the courage to lose his own life for an insult, might take away the life of him who caused it. Let this be a warning to you." His conduct towards strangers was as extraordinary as that which he displayed towards his own sub-The German ambassador, Count Cobentzel, applied iects. for a passport to send a courier to his Court. The Emperor gave for answer, that he could have nothing to say to his Court, and that he should have none. Paul had been induced to join the Coalition against France: he repented of the measure, and shewed his aversion to it, by ill-treating the Representatives of the Courts of England and Austria, and by ordering many French emigrants to quit his dominions. He had; however, a great horror of Revolutionary principles. Two servants, who had been discharged by two English gentlemen, laid an information against their masters, of being Jacobins: these gentlemen were obliged, in consequence, to leave Russia; and would have experienced harsher treatment, if Lord Whitworth had not discovered the plot, and the falsehood of the charge, and made himself responsible for their conduct.

It is well known, that, among other instances of folly, he ordered, by a special Ukase, many of the buildings in the empire to be painted in a particular manner, according to his directions. A lady, whom he admired, appeared one evening at a ball with a pair of gloves of a red colour: the next morning, his palace was painted red. The absurdities,

CHAP. xv. of which he was guilty every day, almost exceed belief. Some excellent paintings in the palace had been removed, by his orders, for the purpose of being varnished; and a few common sea-pieces, executed in the very worst manner, were hung, in the mean time, in room of them, to cover the wall: he noticed one, as he passed through the apartments, declared it to be the finest thing he had ever seen in his life, and angrily asked why such excellent paintings were placed so high, and out of sight. Presently, twenty soldiers entered with ladders, to take down the picture, that he might have it near him while he was at dinner, though it hung in the adjoining room.

> In the course of his morning ride, he observed, at a little distance, a person in a sledge, who did not take off his pelisse. When he reached the palace, he said to an officer, "In such a street I saw a man who did not take off his pelisse; it was green, with dark fur: go, find out who he is." The officer was in utter despair of ever being able to execute such a mad commission; but, from the situation of the street, he suspected that the person might, perhaps, be an Englishman. Hastening, therefore, to the English Club, where the merchants were at dinner, he examined all the pelisses; and having found one which corresponded with the description given by the Emperor, he inquired to whom it belonged: the waiter mentioned the name of the owner, and the policeofficer desired that he might be called out of the room.—" Is this pelisse yours?" "Yes."—The officer departed, leaving the Englishman in doubt as to what steps he should take. His friends advised him to go home; but when he left the room, the pelisse was not to be found: it had been taken to

the Emperor, who, when he saw it, embraced the officer in a CHAP XV. transport of joy, at the same time declaring his surprise that he returned with it so soon.—The pelisse was sent back to the owner, in about an hour's time.

The truth of the following fact can be attested by the whole city of Petersburg.—A carriage, as the Emperor was passing through the streets, was observed not to stop quite so soon as was thought proper; nor did any one descend when it stopped. The officers rode up, took the name of the owner, and again followed Paul. About noon, the lady, to whom it belonged, was informed that one of the police-officers desired to see her. The visits of these persons occasioned as much horror and alarm at Petersburg, as those of the agents of Robespierre produced at Paris. The lady, much distressed, was no sooner informed of the cause of his coming, than she burst into tears, clasping her hands together, and protesting that she had not been out of the house for three days. She ordered inquiry to be made, in order to know who had been in the carriage; and was informed, that the person was a poor miserable cripple, deformed, an ideot from his birth, deprived of the use of his limbs, maintained in the family from charity, and allowed, by his humane protectress, the use of the carriage, for air, when the weather was fine. Will it be believed, that this wretched object was dragged before the Governor; who, when he saw him, shuddered with horror? "I have orders," he said, "to feed you upon bread and water: but I will add a little butter to the one, and a little tea to the other; and, in the mean time, go to the Emperor." Paul, whether from a feeling of compassion not very

CHAP. XV. common to him, or from not wishing to trouble himself any further in the business, ordered the ideot to be taken back to the house of the lady. But the carriage and servants were gone;—the former was seized by the Government; the latter were sent to the army.

> The melancholy effects of his short reign were perceptible in every thing. Science, art, and literature, withered under the blighting influence of his tyranny. Books of almost every description were prohibited. French works of the most costly and expensive kind, if they shewed, by their title-page, that they had been printed during the time of the Republic, were not allowed to be sold. We took up, in a bookseller's shop, a beautiful copy of Buffon's Natural History, and the marks of the police were visible in the title-page of every volume. Foreign Journals were reprinted with the alterations which the Government thought proper to introduce. Censors were appointed to superintend every publication, to open and read letters, to suppress and destroy whatever they did not approve or could not comprehend. In the scrutiny which took place, amidst this darkness of intellect and ignorance, we have no reason to wonder at the ludicrous and contemptible blunders that were daily committed'.

> The character and conduct of Paul are sufficiently illustrated by the statements we have given: and more, if it were necessary, might be added, to mark his imbecility and ideotcy.

⁽¹⁾ M. Depping gives the following instance.—The censors had no list of prohibited books: they, therefore, adopted the Index in use at Vienna. In this, there was a prohibition of books relating to the Greek Church: the same were also rejected by the Russian censors!

ideotcy. The strong feeling of hatred which he bore to the CHAP. XV. memory of Catherine led him to counteract and defeat, in every possible manner, the plans which she had formed for the improvement of the empire. The private and public life of this extraordinary woman formed the subject of conversation one evening, when we were present, at the house of Baroness Strogonof, who had been one of her Ladies of the Bedchamber: she related to us many anecdotes respecting her; speaking the whole time as one of her enthusiastic admirers, though discriminating parts of her conduct with penetration and shrewdness of remark. Certainly many traits, which were mentioned, shewed a Remarks on great strength of intellect, and often a feeling heart. She of the Emhad a power and command over herself, which enabled her rine. to retire when in anger, and never to give a decision until her mind was calm and tranquil: she had the talent of rendering every one at ease, when in her presence; and her clemency was shewn on various occasions. When the name of a person who was convicted of high-treason, of even plotting against her, was given in for condemnation, she would frequently desire inquiry to be made, if he had not some cause of vexation; if his mind had not been irritated by some fancied injury or neglect: -at last, the astonished culprit was presented with a sum of money, and ordered to retire to a distant province. Impressed, at first, with a favourable feeling occasioned by the enumeration of many good qualities which were attributed to her, we were disposed to join the list of her panegyrists: but it is impossible, on reflection, to admit any apology for the crimes which tarnish all her glories, if they do not entirely obscure VOL. VI. 3 Y them.

press Cathe-

CHAP. XV. them. It will readily be allowed, that her reign has been marked by great events, and that her measures were often directed by sound wisdom and policy. Her apparent virtues also relieve the attention from the horrors and dark shades of infamy, with which they are surrounded; but the mind soon turns from the contemplation of them, with suspicion and distrust: they seem to be more the result of an artful policy, than the offspring of beneficence:—so difficult is it to conceive, that a woman engaged during one part of her life in murder, and the other in lust and ambition, could be capable of any thing lovely or of good report—any thing noble or amiable—any thing which could adorn or dignify the human mind!

Deposition and murder of Peter the Third.

Whenever the circumstances attending the death of Peter THE THIRD are introduced, they are always accompanied with the assertions, that Catherine, by the murder of her husband, averted a similar fate, which would have speedily overtaken her. This plausible tale, easily related, as easily prevailed. The multitude, who seldom trouble themselves to reflect, when they find others ready to think for them, are hardly yet awakened from their delusion. It is wonderful that a representation so totally groundless should have met with such implicit belief! What reason have we for supposing that Peter intended the murder or the imprisonment of his wife? He built, it is said, a set of apartments in the Fortress of Schlussenburg; they were erected with unusual expedition; he himself superintended the work; -insinuations, which really prove nothing. As persons have not been wanting to defend the conduct of Catherine throughout the whole

course of the events which occurred in the Revolution of CHAP. XV. 1762, it is proper to advert to what has been urged by those who have advocated the cause of Peter. They state, that he was acquainted with the plans she had formed, in conjunction with her favourite Orlof, for taking possession of the reins of government;—that when the consequences of her licentious conduct and intimacy with that officer were too evident, Peter proposed to punish her in some public manner;—that, to avoid this disgrace, Catherine completed and hastened the conspiracy which ended in his dethronement and murder. That the indolence, and want of resolution, and pusillanimity of Peter contributed to his own ruin, cannot be doubted: there was a period, during the revolt, when the soldiers expressed their regret at having been so easily persuaded, by Orlof and Razoumofsky and others, to abjure their allegiance to him; and would have marched, under his command, against the rebels. The circumstances connected with the seizure and imprisonment of Peter at Robscha have been variously related. Ismaelof, whom he sent to express his readiness to enter into negotiation with the Empress, is supposed to have betrayed him to Orlof. He was then conveyed to Robscha. But even after his confinement, the soldiers did not cease to express their disapprobation of what had taken place; and a strong feeling of commiseration for their deposed monarch was excited among various classes of the people. The conspirators found that their

⁽¹⁾ The annexed Plate represents a view of the Palace and Apartment at Robscha, in which Peter the Third was murdered.

CHAP. XV. their only security was in his death.—The rest of the history of Peter the Third is well known. An unsuccessful attempt was made to administer poison to him: as this failed, he was, after a violent resistance, strangled, by Alexis Orlof, Boriatinsky who was the officer on guard, and an obscure individual of the name of Tépelhof¹. His body was publickly exposed, habited in the Holstein uniform; the collar of the dress being so arranged as to conceal the mode of his death, which, however, was very visible in the features of the face. The following night he was buried in the church of the Monastery of St. Alexander Nevsky.

⁽¹⁾ The account in the text is confirmed by a remarkable extract from Mr. GIBBON'S Common-Place Book, given in Lord SHEFFIELD's late edition of the Miscellaneous Works of that writer; which may be properly inserted in this place.

[&]quot;PETER III. was poisoned in a glass of brandy. On his refusing a second glass, "he was forcibly thrown down, and strangled with a handkerchief, by Orlof, Tépelhof, "Potemkin, and the youngest of the Princes Boriatinski. When the body was ex-"posed, the marks of violence on the neck, &c. were evident. Orlof instantly "returned to Petersburg, and appeared at the Empress's dinner, in the disorder of a "murderer. She caught his eye, rose from the table, called him into her closet; " sent for Count Panin, to whom she imparted the news; and returned to dinner with " her usual ease and cheerfulness."

[&]quot;These particulars (Mr. Gibbon says) are taken from a History of the Revolution in 1762, composed by M. Rulhière, a French Officer, who was an attentive spectator, and who afterwards conversed with the principal actors. Prudence prevents him from publishing: but he reads his Narrative to large companies; and I have already heard it twice." GIBBON's Miscellaneous Works, Vol. V. p. 528. 1814.

[[]For a Continuation of the Author's Narrative, of his departure from Petersburg to Moscow, of his interesting description of the latter city, and his journey to the Southern Provinces of the Russian Empire, &c. &c. the Reader is referred to the First Volume of these Travels.—EDITOR.]



APPENDIX.

No. I.

AMŒNITATES ACADEMIAE ABOENSIS.

I COLLECTED, by favour of Professor Porthan, Seventy of the Academic Disputations of Åbo. And, as a Catalogue of their subjects, with their respective dates, will afford a tolerable idea of the line of study pursued in that University, and of the time in which any particular study was the most favoured, sixty-one of them are here added.

It will appear, that under the Presidency of PORTHAN the most interesting topics were discussed.

They form a complete History of Science in Abo, for the last twenty years of the eighteenth century.

- 1782. Dissertatio Botanica, de Calla.—Præside, C. N. Hellenio.— J. F. Sacklen, Satacundensis.
- 1785. Dissertatio Mathematica, de Quadratura Parabolæ.—Præs. J. H. Lindquist.—J. J. Lagerström, Satacundensis.
- 1785. Dissertatio Astronomica, Methodum sistens inveniendi Tempus Verum, ex observatis æqualibus diversarum Stellarum Altitudinibus.

 —Præs. J. H. Lindquist.—A. J. Tammelander, Tavastensis.

- 1786. Specimen Academicum, de invenienda Sectione Conica circa focum datum per data tria puncta transcunte.—Press. J. H. Lindquist.

 —J. Wegelius, Ostro-Botniensis.
- 1786. Dissertatio Gradualis, Observationes quasdam circa Reductionem Angulorum ad Horizontem continens.—Præs. J. H. Lindquist.—J. Rikström.
- 1786. Dissertatio Astronomica, de Parallaxi Annua Planetarum Primariorum ac Cometarum.——Præs. J. H. Lindquist. S. Castren, Ostro-Botniensis.
- 1786. Diss. Botanica, de Evonymo.—Præs. C.N. Hellenio.—C. Ascholin, Satacundensis.
- 1786. Diss. Botanica, de Hippuride.—Præs. C. N. HELLENIO.—C. R. BRAN-DER, Satacundensis.
- 1786. Specimen Calendarii Floræ et Faunæ Aboënsis.—Præs. C. N. Hel-Lenio.—J. G. Justander.
- 1786. Dissertatio, de Origine Literarum Latinarum.—Præs, H. G. PORTHAN.
 —G. J. CAJANDER, Nylandus.
- 1786. Dissertatio Academica, de Bircarlis.—Præs. H. G. Porthan.—F. M. Frantzen, Ostro-Botniensis.
- 1787. Prospectus Methodi Rem Pecuariam scientifice pertractandi.—Præs. G. Bonsdorff.—A. Bonström, Nylandus.
- 1788. Animadversiones in novam Nomenclaturæ Chemicæ Methodum.—
 Publico Examini subjicit J. Gadolin.—Respondente, N. Avellan,

 Tavastensis.
- 1788. Diss. Academica, de Asparago.—Præs. C. N. Hellenius.—U. Pryss.
- 1788. Diss. Acad. de Observationibus Barometricis ope Thermometri corrigendis.—Præs. J. H. Lindquist.—J. Wegelius, Ostro-Botniensis.
- 1789. Meletema Academicum, de Favorino, Philosopho Academico.—Præs. H. G. Porthan.—Z. Forsman, Ostro-Botniensis.
- 1789. Diss. Astronomica, de invenienda apparente Luns Diametro ex data ejus Parallaxi.—Præs. J. H. Lindquist.—A. Sander, Borea-Fenno.
- 1789. Diss. Academica, de Interpolatione pro inveniendo loco Lunæ ex Ephemeridibus.—Præs. J. H. LINDQUIST.—J. ÆJMELÆUS.
- 1789. Diss. Academica, sistens Theoriam Linearum Parallelarum.—Præs. J. H. Lindquist.—E. Rosenback, Satacundensis.
- 1789. Diss. Botanica, de Tropseolo.—Pres. C.N. Hellenio.—A. F. Laurell, Wiburgensis.

- 1789. Diss. Acad. de Fama Magiæ Fennis attributa.—Præs. H. G. PORTHAN.
 —F. J. ROSENBOM, Ostro-Botniensis.
- 1789. Diss. Acad. de Hippophaë.—Præs. C. N. Hellenio. P. Stenberg, Westro-Botniensis.
- 1791. Animadversiones de Libris raris.—Præs. H. G. Porthan.——P. J. Alopæus, Wiburgensis.
- 1791. De vario Usu Litteraturæ Orientalis.——Præs. P. Malmström.—G. Krogius, Wiburgensis.
- 1792. Diss. Acad. sistens Specimina quædam instinctus, quo Animalia suæ prospiciunt Soboli.—Præs. C. N. Hellenio.—F. Juvelius, Ostro-Botniensis.
- 1792. Diss. Botanica, de Cichorio.—Præs. C. N. Hellenio.—H. Nelly, Svio-Gothus.
- 1792. Diss. Academica, de Imperio Hermanrici Ostro-Gothorum Regis.— Præs. H. G. Porthan.—C. Rein, Ostro-Botniensis.
- 1792. Cogitationes de Poëmate Prosaïco.—Præs. H. G. Porthan.—A. Kellander, Satacundensis.
- 1792. Diss. Astronomica, de computando Effectu Aberrationis Luminis in Eclipsibus.—Præs. J. H. Lindquist.—M. J. Tolpo, Borea-Fenno.
- 1792. Diss. Astronom. de Methodo inveniendi Latitudinem Loci ex observatis duabus Solis vel Stellæ cujusdam Altitudinibus.—Præs. J. H. Lindquist.—A. J. Mether, Tavastensis.
- 1792. Diss. Gradualis, de Loxodromiis in Superficie Ellipsoidica.—Præs. J. H. Lindquist.—N. M. Tolpo, Borea-Fenno.
- 1793. Diss. Acad. de invenienda Longitudine Loci ex observata Distantia Lunæ a Stella quadam.—Præs. J. H. Lindquet.—M. Avellian.
- 1794. Diss. Medica, sistens Casum Hæmorrhoïdum suppressarum.—Præs. G. E. Haartman.—S. Björklund.
- 1794. Diss. Acad. Cogitationes sistens de Libertate Græcis callidè a Romanis oblata.—Præs. H. G. Porthan.—M. Enegren, Ostro-Botniensis.
- 1794. Diss. Acad. Animadversiones sistens de Studio novitatis in Philosophia.

 —Præs. H. G. Porthan.—S. Bohm, Ostro-Botniensis.
- 1794. Diss. Acad. de Imperio Hermanrici Ostro-Gothorum Regis.—Præs. H.G. Porthan.—E. Hildeen, Borea-Fenno.
- 1795. Diss. Acad. sistens Cogitationes quasdam de Linguarum Usu Historico.
 —Præs. H. G. Porthan.—J. H. Avellan, Tavastensis.
- 1795. Diss. Acad. de Libertate Philosophandi.—Præs. H. G. Porthan.—P. Wallenius, Wiburgensis.

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- 1795. Diss. Acad. sistens Cogitationes quasdam de Pandora Hesiodea.— Præs. H.G. Porthan.—J. H. Fattenborg, Nylandus.
- 1795. Diss. Acad. de Theoria Solutionis Chemicæ.—Præs. J. GADOLIN.—M. HARFVELIN, Aboensis.
- 1795. De Natura Salium Simplicium.—Præs. J. GADOLIN.—J. G. HAARTMAN.
- 1795. De computando Effectu Convexitatis Superficiei in Arte Libellandi, posita Figura Telluris Ellipsoidica. Præs. J. H. Lindquist. C. G. Utter, Satacundensis.
- 1796. De Invenienda Parallaxi Altitudinis, ex datis Parallaxi Sideris Horizontali, et vera ejus a Zenith Distantia.—Præs. J. H. Lindquist.—T. T. Kriander, Satacundensis.
- 1797. De corrigendis Erroribus Instrumenti Culminatorii.—Præs. J. H. Lindquist.—G. Laurell.
- 1797. De Declinatione Nominum in primis Fennicorum.—E. HILDEEN et G. LAURELL.
- 1797. Animadversiones nonnullæ circa Quæstionem, "Quid Moses de Diis Gentium senserit?"—Præs. G. GADOLIN.—J. AVELLAN, Tavastensis.
- 1797. Dissertatio Inauguralis Medica, sistens Toxicologiæ primas Lineas.—Præs. G. E. HAARTMAN.—B. HOLMUDD, Uleaburg.
- 1797. De Tussilagine Commentarii Botanici.—J. G. HAARTMAN, et A. J. Orrström, Aboensis.
- 1797. De Speciebus Solutionis Chemicæ.—Præs. J. GADOLIN.—M. SYLVEX, Sacundensis.
- 1798. Examen Methodi Æquationes Algebraicas resolvendi; a C. L. Bendavid, nuper propositæ.—Præs. J. H. Lindquist.—J. F. Ahlstedt, Satacundensis.
- 1798. De Natura Carbonis Vegetabilis.—Præs. J. GADOLIN.—T. T. KRIAN-DER, Satacunda-Fenno.
- 1798. De Silica ex Solutione Alkalina per Calcem præcipitata.—Præs. J. Gadolin.—J. Holstius, Ostro-Botniensis.
- 1798. De Variationibus Avium quoad ipsarum Colorem.—Præs. C. N. Hel-LENIO.—A. CAJAN, Ostro-Botniensis.
- 1798. De Philosophia Populari complexa.—Præs. H. G. Porthan.—G. Palander, Tavastensis.
- 1798. De Pancratio Gymniei apud Veteres Græcos Ludi Genere.—Præs. G. Gadolin.—G. Domander, Tavastensis.
- 1798. De Dignitate Jarlorum in Suecia.—Præs. H. G. Porthan.—E. J. Frostenes, Ostro-Botniensis.

- 1798. Specimen Descriptionis Organicæ Linearum Curvarum.—Auctor, G. G. HALLSTRÖM; et Respondens, C. H. STRANBERG, Nylandus.
- 1798. Specimina quædam Geometriæ Curvilineæ.—Præs. A. J. METHER, et N. J. BERGHÆLL, Tavastensis.
- 1799. De Methodo Superficies Solidorum duplici Integratione investigandi.
 —Auctor, G. Palander; et Respondens, C. Aström, Tavastensis.
- 1799. De Fide Revelationi Divinæ habenda.—Præs. J. Tengström.—E. J. Feosterus, Ostro-Botniensis.
- 1799. De inveniendis Lineis Curvis ex datis Radii Curvaturæ Proprietatibus, Problemata.—Auctore, G. G. Hallström; et Respondente, C. H. Hollberg, Borea-Fenno.

In the year 1766, Professor Porthan, then Student in the University, produced his learned Dissertation De Poesi Fennica; one of the most erudite and interesting Essays that have appeared among the Academic Dissertations of Åbo.

No. II.

INDEX PRÆLECTIONUM.

QUAS, BONO CUM DEO,

IN REGIA ACADEMIA ABOENSI,

OMNIUM FACULTATUM

PROFESSORES, CETERIQUE DOCENTES,

A DIE I. OCTOBRIS AN. MDCCXCIX. AD IDEM TEMPUS ANNI SEQUENTIS.

PUBLICE ET PRIVATIM HABEBUNT.

IMPERANTE AUGUSTISSIMO ET POTENTISSIMO, GUSTAVO ADOLPHO,

SVECORUM, GOTHORUM, VANDALORUMQUE REGE &c. &c. &c.
DOMINO NOSTRO CLEMENTISSIMO.

REGIÆ ACADEMIÆ ABOENSIS CANCELLARIO,

ILLUSTRISSIMO ATQUE EXCELLENTISSIMO COMITE,
DOMINO CAROLO ADAMO WACHTMEISTER.

EX IMPERII SVIOGOTHICI PROCERIBUS UNO,
SUPREMO AD AULAM REGINÆ VIDUÆ MARESCHALLO, EDUCATIONIS REGIÆ
ANTEHAC GUBERNATORE VICARIO,

ORDINUM REGIORUM EQUITE AC COMMENDATORE.

PRO-CANCELLARIO

REVERENDISSIMO DOMINO, JACOBO GADOLIN,

S.S. THEOL. DOCTORE, DIOCESEOS ABOENSIS EPISCOPO, ORDINIS REGII DE STELLA POLARI COMMENDATORE.

PROFESSORES.

In Facultate Theologica:

- Christianus Cavander, S.S. Theol. Prof. Prim. et Archi-Præp. in iis Capitibus, quæ ex Evangelio Lucæ adhuc supersunt, publice interpretandis, primum b.c. D. versabitur, in Auditorio Majori h.a. m. IX, deinde Johannis Evang. suscepturus. Privatim futuris Auditoribus, in primis S. Ministerii Candidatis, fidelia saltem consilia monitaque ad praxin muneris et vitæ spectantia suppeditare studebit.
- LAURENTIUS O. LEFREN, S. S. Theol. Professor Reg. et Ordin. hoc anno Academico Esaiæ Prophetiam publice explicare constituit, idque h. III. post meridiem; privatas Scholas desideriis expetentium adcommodaturus.
- JACOBUS TENGSTRÖM, S. S. Theol. Prof. Reg. et Ord. nec non R. Acad. h.a. Rector. Doctrinam morum e Christianæ Theologiæ fontibus haustam, præeunte Cel. J. C. Döderlein, publice legendo tradere et absolvere conabitur; Dogmaticam non minus quam Homileticam Religionis proponendæ rationem privatis lectionibus alternis persecuturus.

In Facultate Juridica:

Matthias Calonius, Juris Prof. Reg. et Ord. Eques Ord. Reg. de Stella Polari, Supremi Reg. Tribunalis Revisorii p. t. Membrum, Holmiæ munere clementissime sibi delato detentus adhuc versatur. Partes vero ejus, donec ad nos redierit, R. Acad. Secretarius interim administrabit.

In Facultate Medica:

ORDINARII:

- Gabriel Ericus Haartman, M.D. Med. Pract. Prof. Reg. et Ord. Commentaria in Pharmacopœam Svecanam proxime præterlapso anno Academico incepta continuabit; docebit autem publice h. a. m. XI. in Auditorio Mathematico; privatamque operam ad desiderium Alumnorum Medicorum lubenter accommodabit.
- GABRIEL BONSDORFF, Phil. et Med. Doct., Anat. Chirurg. et Art. Veter. Prof. Reg. et Ord. Facult. Med. h.a. Decanus, historiam Actionum corporis, quas Animales vocant, publicis lectionibas h. a. m. IX^a in Audit. Anatom. habeadis, succincte tradet; Demonstrationibus et exercitiis anatomicis atque medico-legalibus privatis horis sedulo inserviturus.

EXTRAORDINARIUS:

Josephus G. Pipping, M.D. Med. Prof. Reg. et Extraord. atque Membrum Fac. Med. Ordinarium, absoluta morborum Oculorum expositione, morbos ossium corporis humani pertractabit, idque publice in Auditorio Anatomico hora decima antemeridiana. Exercitationes autem privatas desideriis Artis Studiosorum salutaris accommodabit.

In Facultate Philosophica:

- Johannes Bilmark, Historiar. ac Philosoph. Pract, Professor Reg. et Ordin.
 Jurisprudentiam Naturalem et Politicam Septemtrionalium Europæ Regnorum Notitiam publicis Lectionibus, in Auditorio Majori hora XI. a.m.
 Deo Volente, habendis, alternis vicibus explicabit; Privatam institutionem desiderio suorum Auditorum accommodaturus.
- Andreas Planman, *Physices Prof. Reg. et Ord.* Elementa Mechanices, in Auditorio Superiori, hora II^{da} pomeridiana, publice proponet; privatim vero ea tradet, quæ Honoratissimi Commilitones desideraverint.
- Henricus Gabriel Porthan, Eloquentiæ Professor Reg. et Ord. Orationes Ciceronis selectas et Virgilium, diebus alternis, in Auditorio Minori hora antemerid. X, publice interpretabitur. Privatam vero diligentiam exercitiis styli utriusque, more solito moderandis, aliisque muneris sui partibus, in quibus Auditores suam potissimum exposcere operam intellexerit, pro virili implendis, dicabit.
- OLAVUS SCHALBERG, Phil. Mag. nec non Metaphys. et Logices Profess. Reg. atque Ordin. Lectionibus publicis, Psychologiam Empiricam, D.V., explicabit, privatis ea traditurus, quæ sui Auditores ipsi desideraverint. Publice leget hora a.m. octava.
- CAROLUS NICOLAUS HELLENIUS, Œcon. Profess. Reg. et Ord. absolutis iis, quæ ex cultura olerum proponenda restant, præcepta cultus arborum frugiferarum tradet, idque publice in Auditorio Mathematico hora X^{ma} antemeridiana. Privatim in omnibus, quæ ad se pertineant, Juventutis Academicæ commodis pro virili parte consulet.
- Johannes Gadolin, Chemiæ Prof. Reg. et Ord. prælectionibus publicis hoc anno Naturam Aquæ et Salium, duce libro a se edito, explicabit, in Auditorio Mathematico hora p. m. III^{tia}. Privatam operam ad desideria Auditorum lubens accommodabit.
- Gustavus Gadolin, Lingg. Orient. et Gr. Prof. Reg. et Ord. nec non Fac. Philos. h. a. Decanus, publicis lectionibus hora a.m. IX. in Auditorio Mathematico habendis Iliados Homericæ explicationem continuabit. Privatam operam literis Hebræis tradendis impendet, neque ceteroquin Honorat. Commilitonum desideriis defuturus.

Franciscus Michael Franzen, Hist. Litter. Prof. et Reg. Acad. Bibliothecarius, lectiones quas semestri vernali proxime præterlapso instituit, hoc anno Academico persecuturus, literarum humaniorum apud Romanos aliasque et antiquas et hiodiernas Europæ Occidentalis et Borealis gentes Historiam publice in Audit. Mathematico hora a. m. VIII. pertractabit. Ceterum ut ad R. Acad. Bibliothecam Academicis aditus diebus Mercurii et Saturni horis p. m. II. & III. pateat, curabit, et privatim sedulam in iis, quæ suæ sunt interpretationis, partibus, operam studiosæ juventuti ministrabit.

Andreas Johannes Mether, Mathem. Prof. Reg. et Ord. Semestri autumnali utramque Trigonometriam, sequente autem anni hujus Academici intervallo Doctrinam Sectionum Conicarum prælectionibus publicis, in Auditorio Minori h.a.m. XI. habendis, explicabit. Lectiones privatas desiderio Honor. Commilitonum accommodabit.

ADJUNCTI.

In Facultate Theologica:

JACOBUS BONSDORFF, S. S. Theol. Licent. et Adjunct. Ordin. in prælegendis, quæ restant ex Epitome Theol. Dogm. S. Vener. Mori, capitibus versabitur, cetera quoque et Hermeneutices et Pastoralis Doctrinæ momenta haud neglecturus.

In Facultate Medica:

NICOLAUS AVELAN, Medic. Doct. Anat. Prosector et Facult. Med. Adjunct. Ord., Dissectionibus Anatomicis publice inserviet; privatim, quæ de Lectionibus Osteologicis, feriis Academicis interruptis, explicanda restant, persecuturus.

Botanices Demonstratoris munus vacat.

In Facultate Philosophica:

ORDINARII:

Henricus Alanus, Reg. Acad. Secretarius, coeptam proxime præterlapso semestri Tituli Codicis Fridericiani de Jure Hæreditatis interpretationem, per illud hujus Anni Academici spatium, quo Holmiæ adhuc commorabitur Ordinarius Juris Professor, publicis Lectionibus ejus loco continuabit, quam simulac absolverit, sequentem ejusdem Codicis Titulum pro ratione temporis adgredietur explicandum. Privatim Elementa tradet Jurisprudentiæ Civilis.

JOHANNES SUNDWALL, Fac. Philos. Adj. Ord. disciplinas morales Auditoribus suis explicare continuabit.

EXTRAORDINARIUS:

MICHAEL HOLMBERG, Professor, Adjunctus Chemiæ Extraordinarius, Elementa Halurgiæ et Pharmaceutices experimentis instituendis Auditoribus demonstrabit.

MAGISTRI DOCENTES.

In Facultate Theologica:

- NICOLAUS GUSTAVUS BRANDER, S. Theologiæ Docens, desideriis Honoratissimorum Dom. Commilitonum, omni, qua potest diligentia, operam suam accommodare conabitur.
- ERICUS JOHANNES FROSTERUS, Joh. Fil., S. S. Theologiæ Docens, in iis, quæ suarum sunt partium, præstandis, Honoratissimis Dominis Commilitonibus pro viribus inservire conabitur.

In Facultate Philosophica:

- JOHANNES BONSDORFF, Linguar. Sacrar. Docens et Amanuens. Consist. Acad. operam suam desideriis Honoratissimorum Commilitonum lubens accommodabit.
- 1. AURENTIUS WADELL, Philos. Pract. et Polit. Docens, Philosophiam Moralem hoc anno tractabit, in exercitiis consuetis, si volupe fuerit, desideriis Honor. Dom. Commilitonum non defuturus.
- N ICOLAUS MAGNUS TOLPO, Metaphysices Docens, in exhibenda et pro virili explicanda Terminologia Philosophiæ Criticæ, vel et in aliis quæ ad se pertinent, operam suam Honoratissimis Dom. Commilitonibus offert.
- Gustavus Gabriel Hallström, Physices Docens et Amanuensis Biblioth.

 Reg. Acad., Elementa Hydrostaticæ Auditoribus proponere constituit.

 Aliis quoque tradendis Scientiis Physicis, si id desideraverint Honoratissimi Commilitones, operam suam omni, qua potest, diligentia impendet.
- Andreas Johannes Lagus, Græc. Litt. Docens et R. Acad. Biblioth. Aman. Ord. futuris suis Auditoribus Anthologiam Græcam Brunckianam explicare constituit.
- Johannes Henricus Fattenborg, Litt. Orient. Docens, in Libro Psalmorum explicando desiderio Honorat. Commilitonum satisfacere conabitur.
- Johannes Petrus Winge, *Economiæ Docens*, in tradendis, quæ ad suam spectant scientiam, usui ac desiderio Honoratissimorum Commilitonum lubenter satisfacere conabitur.

- MAGNUS ALOPÆUS, Math. Docens, Algebram tradet, de cetero desideriis Honorat. Dom. Commilitonum sese accommodaturus.
- OANNES WIDE, Historiarum Docens, ad desideria Honor. Commilitonum lubens respondere conabitur.
- MICHAEL CHORÆUS, Eloquentiæ Docens, in Auctore quovis explicando, atque stylo formando, suam Honorat. Commiliton. operam offert.
- GABRIEL PALANDER, Matheseos Adplicatæ Docens et Biblioth. Reg. Acad. Amanuensis, Elementa Astronomiæ Sphæricæ, aut si quam aliam Honor. Domini Commilitones præoptaverint ex genere Mathematico disciplinam, tradere constituit.

ARTIUM CULTIORUM MAGISTRI.

- GEORGIUS DANET, Linguæ Gallicæ Magister, diebus Mercurii et Saturni hora indicanda Librum, cui Titulus: Les Aventures de Telémaque, publice interpretabitur; Studiosis privatam in Lingua Gallica institutionem desiderantibus haud defuturus.
- JOHANNES BAPTISTA MEIJER, Palæstræ Athleticæ Præfectus, artem arma dextre tractandi et strenue vibrandi eos docebit, qui suam expetunt manuductionem.
- Johannes Thorenberg, Director Musices et Organ. ad Templum Cathedral.

 Aboënse, Musicam publicis concentibus, diebus Mercurii et Saturni hora
 III. p. m. habendis docebit. Privatam quoque institutionem expetentibus,
 suam haud denegabit operam.

No. III.

An Explanation, in the Swedish Language, of the Plan of the Great Mine at Fahlun in Dalecarlia was found among Dr. Clarke's Manuscripts.—The Editor is indebted to the kindness of Dr. Fiott Lee (with whose name the Reader is already acquainted, from the mention made of it in different parts of the present and preceding Volume), for a translation of that I'aper.

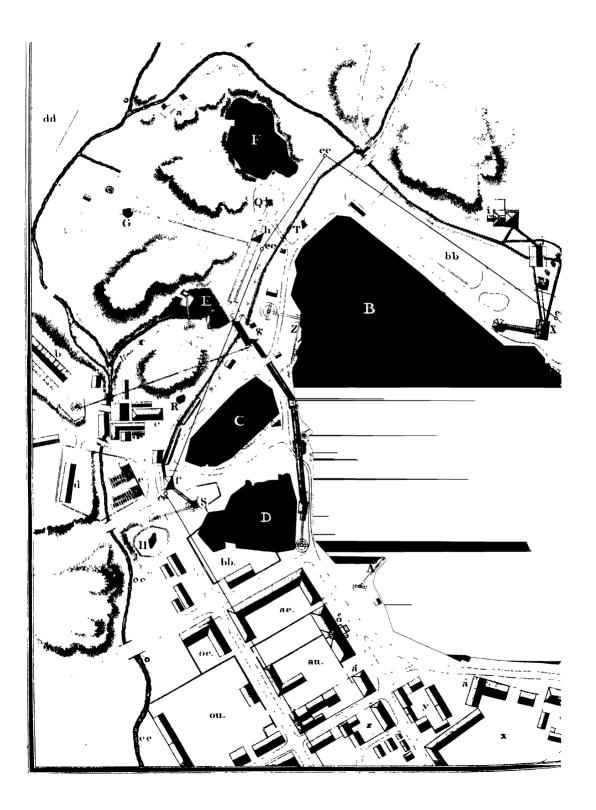
· PLAN

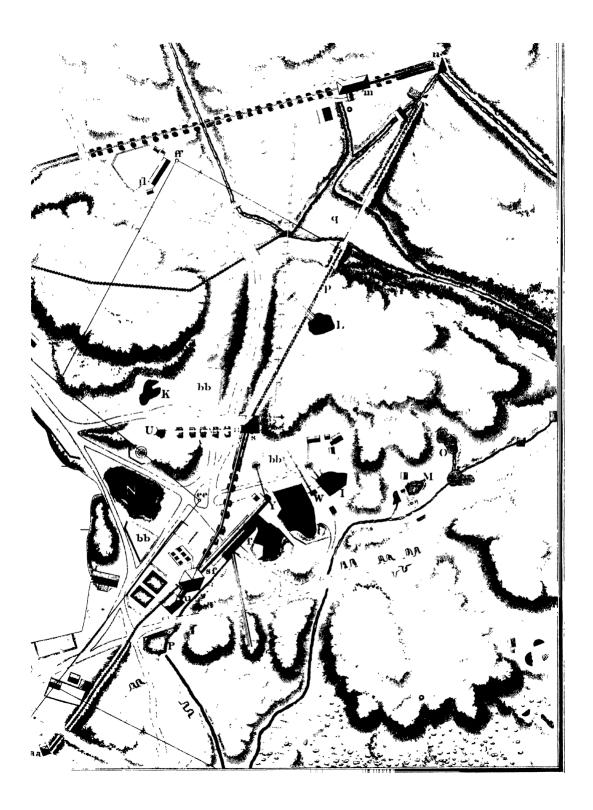
OF THE

Situation of the MINES at the GREAT COPPER MOUNTAIN.

- A. The Great Mine.
- B. The Mine of Mans Nils (pronounced Mons).
- C. The Long Mine.
- D. The Mårdskinns Mine, or The mine of the skins of martens.
- E. The Mine of John (quære, of King John).
- F. The Mine of the Queen.
- G. The Mine of Meyenholtz, or The mine of Expectation.
- II. The Drapp Minc. (The mine of murder, cædes, or manslaughter, or of misadventure; probably the last: a mine where expectations had been formed, and had failed.)
- I. The Mine of Queen Louisa Ulrica.
- K. Tunkarls Mine.
- L. The Mine of Eric Mall.
- M. The Mine of Fahlstrom.
- N. The Mine of Krak (pronounced Krok).
- O. Fahlström's Ditch or Dyke.
- P. The Experiment or attempt of Calmare. (I do not think that it is named after the town of Calmar, but after some person.)
- Q. The Shaft of the Queen's Mine.
- R. The Shaft of Rålamb (the name of a noble family in Sweden).
- S. The Shaft of Creutz (a noble family).
- T. The Shaft of Wrangel (a Baron's family).
- U. The Shaft of King Adolph Frederic.

- W. Fri-shaft (or a free, or privileged, or noble shaft).
- V. The Shaft of Wrede (a noble family).
- X. The Shaft of King Frederic.
- Y. The Shaft of Queen Louisa Ulrica's Mine.
- Z. The Shaft of Ambrus (quære, Ambrose).
- A. The Scaffold of Kistwind.
- Ä. The Scaffold of Blankstöl. (These are piles of timber built over the precipices of the mine, and from which the ore is drawn up from below.)
- a. The Red-ochre Work.
- . The Work of Evaporation.
- c. The Vitriol-boiling Factory.
- d. The House for burning the Red-ochre.
- e. The Work for precipitating Copper.
- f. The Machinery of the shaft of Creutz.
- g. The House of the Wheel-machinery of the shaft of Wrede.
- h. The Machinery of the shaft of the Queen's Mine.
- The New Machinery of King Frederics shaft.
- The building containing the new machinery.
- k. The Old Machinery of King Frederic's shaft.
- Garden-tall-backe (literally, The yard of the Pine Hill.)
- The House of the wheel machinery of King Frederic.





- n. The House of the Dam.
- o. The Ditch or Dyke of the Crown.
- p. The Pipstole of Adolph Frederic.
- q. The Dam of Tall-backe.
- r. The Dyke of Queen Margaret.
- s. The Machinery of King Adolph Frederic.
- ss. The Machinery of Queen Louisa Ulrica.
- t. A Magazine for sundries.
- u. "Bok" means beech-tree, or a book; and "Wastewärk" means washing - works, where probably the ore is washed. (The word, Bok may have been perhaps inserted by mistake.)
- w. The House and Premises of the Manager of the mine.
- x. Yard or Buildings for the Planks or Timber of the Crown (for the use of the machinery, or of the mine in general).
- y. Public-house, or Tavern of the minc.
- z. Lazaretto of the minc.

- The House of the Ammunition (quære, of the gunpowder used in the mines).
- ä. Blacksmith's Shop.
- The Room of the mine (probably for public business).
- ac. The Public-office of the Master of the
- oe. The Out-houses of the Master of the mine (stables, barns, &c.)
- au. The Old Timber-yard.
- ou. The New ditto.
- aa. The Machinery of Blankstöl.
- bb. Wood plank or board.
- cc. Rivulet or bason of water from the mine.
- dd. Yard for charcoal.
- ee. The Boundary of the Great Mine in the year 1703.
- ff. The Boundary of the Mine of Queen Louisa
 Ulrica in 1794.

No. IV.

TEMPERATURE OF THE ATMOSPHERE,

ACCORDING TO

DIURNAL OBSERVATION,

Made at Noon, unless otherwise expressed;

WITH

A CORRESPONDING STATEMENT OF TEMPERATURE IN ENGLAND

DURING THE SAME PERIOD:

The latter being extracted from a Register kept in the Apartments of the ROYAL SOCIETY in LONDON, by Order of the President and Council.

Observation on the Scale of Fahrenheit.	Where made	When made.	Observation in London on the same day, by the Scale of Fahrenheit.
40	Christiania,	October 24, 179	99. 49
41	Christiania,	October 25.	50
39	Christiania,	October 26.	49
42	Christiania,	October 27.	41
48	Christiania,	October 28.	52
41	Romsaas,	October 29.	53
48	Kiölstad,	October 30.	55
43	Edsbroen,	October 31.	57
47	Leerhol, Sweden,	November 1.	58
47	Carlstad,	November 2.	55
51	Molkem,	November 3.	57
48	Philipstad, 1 P. M.	November 4.	54
39	Onshytta,	November 5.	48
39	Hjulsiö,	November 6.	. 55
44	Ostanbo,	November 7.	49
	Place omitted,	November 8.	46
3 8	Fahlun, 2 P. M.	November 9.	44
, 3 8	Hornas,	November 10.	49
34	Grådö	November 11.	48
36	Broddebo, 2 P. M.	November 12.	57

Observation on the scale of Fahrenheit.	Where made.	When made.	Observation in London on the same day, by the Scale of Fahrenheit.
42	Between Långtora and Saf	va, 2.P.m. November 13.	54
	Upsala, not estimated,	November 14.	51
44	Upsala,	November 15.	50
44	Rotebro,	November 16.	46
44	Stockholm,	November 17.	44 ·
40	Stockholm,	November 18.	47
39	Stockholm,	November 19.	48
38	Stockholm,	November 20.	47
39	Stockholm,	November 21.	41
38	Stockholm,	November 22.	45
40	Stockholm,	November 23.	48
42	Stockholm,	November 24.	40
42	Stockholm,	November 25.	46
14	Stockholm,	November 26.	46
38	Stockholm,	November 27.	47
37	Stockholm,	November 28.	44
40	Stockholm,	November 29.	40
40	Stockholm,	November 30.	49
38	Stockholm,	December 1.	50
28	Stockholm,	December 2.	45
34	Stockholm,	December 3.	48
34	Stockholm,	December 4.	42
32	Stockholm,	December 5.	48
32	Stockholm,	December 6.	45
32	Stockholm,	December 7.	41
30	Stockholm,	December 8.	40
28	Stockholm,	December 9.	44
28	Stockholm,	December 10.	43
28	Stockholm,	December 11.	42
30	Stockholm,	December 12.	4(1
Scale of Celsius.		D 1 . 10 .	a.
1	Stockholm,	December 13.	35
2	Ensta,	December 14:	36
8	Staba,	December 15.	34 ·
8	Grissehamn,	December 16.	35
3	Grissehamn,	December 17.	33 .

Soule of Celsius.	Where made.	When made.	Observation in London on the same day, by the Scale of Fahrenheit.
10	Grissehamn,	December 18:	35
10	Grissehamn, '	December 19.	27
4	Ekerő,	December 20.	26
10	Frebbenby,	December 21.	31
• 4	Skårpans, 1 P. M.	December 22.	9 3
31/2	Vardö,	December 23.	31
3	Kumlinge,	December 24.	. 3 3
2	Kumlinge,	December 25.	34
14	Kumlinge,	December 26.	36
18	Kumlinge,	December 27.	32
8	Kumlinge,	December 28.	26
11	Kumlinge,	December 29.	32
6	Kumlinge,	December 30.	31
11	Kumlinge,	December 31.	23
6	Bjorkö,	January 1, 18	00. 25
24	Vinkela, 4 p. m.	January 2.	38
23	Tursanpare,	January 3.	47
20	Åbo,	January 4.	47
21	Åbo,	January 5.	45
25	Åbo,	January 6.	41
20	Åbo,	January 7.	41
20	Åbo,	January 8.	41
20	Åbo,	January 9.	43
18	Åbo,	January 10.	40
16	Åbo,	January 11.	42
16 1	Åbo,	January 12.	43
111	Åbo,	January 13.	45 ~
8 1	Åbo,	January 14.	44
10 1	Åbo,	January 15.	43
111	Near Åbo,	January 16.	3 9
98	Sapla,	January 17.	39
0	Bjorsby,	January 18.	45
	Omitted,	January 19.	4 5
	Omitted,	January 20.	35
+11	Sibbo,	January 21.	34
3	Parno, 1 P. M.	January 22.	87

ale of Calsius.	Where made.		When made.	Observation in London on the same day, by the Scale of Fahronheit.
o I	Frontier of Russia	Dalaia		
3 1	Frederickshamm, 1	Pyltis	January 23.	39
18	Omitted.	•	January 24.	40
	Wibourg,	-	January 25.	44
2	- '		January 26.	51
0	Petersburg, Petersburg.		January 27.	45
+2	G,		January 28.	46
+21/2	Petersburg,		January 29.	44
+51	Petersburg,		January 30.	42
+5	Petersburg,		January 31.	41
+ 1	Petersburg,		February 1.	46
+21/2	Petersburg,		February 2.	44
+31	Petersburg,		February 3.	47
+2#	Petersburg,		February 4.	45
+21	Petersburg,		February 5.	38
-2	Petersburg,		February 6.	35
+3	Petersburg,		February 7.	36
-3	Petersburg, 1 P. M.		February 8.	34
-7	Petersburg,		February 9.	36
- 16	Petersburg,		February 10.	36
-7	Petersburg,		February 11.	3 6
−9₽	Petersburg,		February 12.	32
-101	l'etersburg,		February 13.	32
$-6\frac{1}{2}$	Petersburg,		February 14.	32
$-4\frac{1}{2}$	Petersburg,		February 15.	3 5
-12	Petersburg,		February 16.	41
-11	Petersburg,		February 17.	40
-18	Petersburg,		February 18.	41
-5	Petersburg,		February 19.	40
$-4\frac{1}{2}$	Petersburg,		February 20.	44
-13	Petersburg,		February 21.	51
-1	Petersburg,		February 22.	5 3
- 15	Petersburg,		February 23.	4 9
- 26	Petersburg,		February 24.	38
-24	Petersburg,		February 25.	40
-26	Petersburg,		February 26.	33
– 15	Petersburg,		February 27.	82

de of Calsins.	· Where made,	When made.	Observation in London on the same day, by the Scale of Fahrenheit.
10	Petereburg,	February 28.	34
-11	Petersburg,	March 1.	38
-10	Petersburg,	March 2.	41
-13	Petersburg,	March 3.	40
-14	Petersburg,	March 4.	39
$-10\frac{1}{2}$	Petersburg,	March 5.	35
$-12^{\frac{1}{2}}$	Petersburg,	March 6.	32
-7	Petersburg,	March 7.	32
+3	Petersburg,	March 8.	35
+2	Petersburg,	March 9.	36
+2	Petersburg,	March 10.	38
+2	Petersburg,	March 11.	53
+1	Petersburg,	March 12.	42
+21/2	Petersburg,	March 13.	40
+2	Petersburg,	March 14.	42
+2	Petersburg,	March 15.	46 ·
-15	Petersburg,	March 16.	47
-15	Petersburg,	March 17.	39
-5	Petersburg,	March 18.	39
-6	Petersburg,	March 19.	41
-15	Petersburg,	March 20.	4 5
-15	Petersburg,	March 21.	49
-15	Petersburg,	March 22.	46
-8	Petersburg,	March 23.	51
- 5	Petersburg,	March 24.	5 3
+2	Petersburg,	March 25.	52
-10	Petersburg,	March 26.	54
-14	Petersburg,	March 27.	55
-12	Petersburg,	March 28.	49
-5½	Petersburg,	March 29.	52
+1	Petersburg,	March 30.	57
+4	Petersburg,	March 31.	50
-13	Petersburg,	April 1.	53
· O	Petersburg,	April 2.	49

No. V.

NAMES OF PLACES VISITED IN THE AUTHOR'S ROUTE,

WITH THEIR DISTANCES FROM EACH OTHER.

CHRISTIANIA to STOCKHOLM.

CHRISTIANIA, to	Danish Miles.	
Romsaas	- 1	Saxån
Schesmoe	- 11	Nytorp -
M oe -	- 1	Hjulsiö
Holen	- 1	Laxbro -
Kiölstad	- 1½	Hogforss -
Hæberg	- 1	Hellsion
Ous	- 11/2	Ostanbo -
Sındby	- 1	Smedbacka -
Kongswinger -	- 1 <u>-</u>	Bommarsbo -
Edsbroen	- 14	Russ-gården -
Magnor (Enter the Swed	lish	
territory)	- 1 ³	Naglarby - Fahlun -
	14	Naglarby -
	Swedish Fughsh Miles, Miles,	Säter Grådö -
Magnor to Morast -	- 1 7	
Haga	- 1 7	Avestad -
Strand	- 1 7	Broddebo -
Hogvalla	- 13 12	Sala
Leerhol	$-1\frac{1}{2}$ $10\frac{1}{2}$	To the Mine, and
Skampäs	- 1 7	Tarnaby -
Hogboda	- Ož 5.1	Gastre -
Prestbol	- 1½ 10½	Långtora -
Ilberg	- 1 7	Safva
Carlstad	- 12 121	Upsala Alsike -
Brästegård	- 1½ 8 ³	Marsta
Molkem	- 13 12]	
Brättefors	- 2 14	Rotebro -
Philipstad	- 14 83	STOCKHOLM
Onshytta	- 07 51	Т

	8	wedish Miles.	English Miles
Saxan	-	1	. 7
Nytorp	-	2	. 144
Hjulsiö	-	1 1/2	. 10½
Laxbro	-	2	. 14
Hogforss	-	11	. 101
Hellsion -	-	$1\frac{1}{2}$. 101
Ostanbo	-	1	. 7
Smedbacka	-	11/2	. 101
Bommarsbo	-	1 ½	10^{1}_{2}
Russ-gården	-	1	. 7
Naglarby	-	14 .	. Ց∦
Fahlun	-	21	15^{3}_{1}
Naglarby	-	24	. 151
Säter	-	13	. 10/
Grådö	-	2	. 14
Avestad	-	1 ½	. 101
Broddebo	-	24	. 194
Sala	-	11	. si
To the Mine, and return	-	O§	. 31
Tarnaby	-	14	. 84
Gastre	-	13	. 124
Längtora	-	14	$. 8^{3}_{1}$
Safva	-	12	~
Upsala	-	13	. 12
Alsike	-	$1\frac{1}{2}$. 101
Marsta	-	13	12
Rotebro	-	1 3	. 124
STOCKHOLM -	-	2	. 14
Total -	-	633 ;	447

From STOCKHOLM to ABO.

STOCKHOLM, to	Swedish English	Swedish English Miles, Miles.
Eustad	- 12 121	Vardö - 1½ 10½
Osby '	- 2 14	By water to Kumlinge - 3 21
Hall	- 1 7	Over ice to Bjorkö 1½ 8¾
Rilanda	- 1½ 8¾	Brandö, by land 11 83
Kragstu	- 1 7	Over ice to Varssala 2½ 17½
Svanberg	- 1 7	Over ice and land to Helsing, 2 14
Staby	- 1½ 8¾.	By land to Himois 1 1 11 1/4
Tresta	- 1½ 10½	Vinkela $-\frac{3}{4}$ $5\frac{1}{4}$
Grissehamn	- ¾ 5¼	L aitis $\frac{1}{2}$ $3\frac{1}{2}$
By water to Ekerö -	- 7 49	Tursanpare - $1\frac{1}{2}$ $10\frac{1}{2}$
By land to Frebbenby	- 1½ 8¾	Nussis-Nummis - $1\frac{1}{2}$ $10\frac{1}{2}$
Enkerby	- 1½ 8¾	Abo $- \frac{15}{8} 11\frac{1}{4}$
Haroldsby	- 11 81	
Skårpans	- 1½ 8¾	Total $42\frac{1}{2}$ $297\frac{1}{2}$

From ABO to the FRONTIER OF RUSSIA.

Ăво, to	Swedish English Miles. Miles.
Peike	· 1½ 10½
Vistū	· 11
Handela	· 13
Sahla	- 1 7
Haila	- 2 14
• Savankby -	- 1¾ 12¼
Bjorsby	2 14
Miolbaltstad -	- 2 14
Kockis	- 13 121
Bollsta	- 11 81
Quis	- 2 14
Bembole	$-1\frac{3}{4}$ $12\frac{1}{4}$

						Sw M	edish liles.		English Miles
Helsingfor	5		-		-	-	2	•••	14
Haxbole	-		•	-		-	13	•••	121
Sibbo		-		-		-	1 1	•••	101
Wakkaski		-		-		-	11	٠	83
Borgo		-		-		-	11		83
Illby	-		-	-		-	1	٠,.	7
Forsby		-		-		-	11		82
Parno	-		•	-		-	1		7
Lbuisa		-		-		-	11		83
Tesjo	-		-		-	-	1	•••	7
Aberfors		-		-		-	1	•••	3 ½
			T	otal -	-	- 3	3 2		236£

From Aberfors to Petersburg.

ABERFORS, to	Russian English Versts. Miles.				Russian Versts.		English Miles.
Kymene	- $22\frac{1}{2}$ 15	Konuta	-	-	- 22		14]
Frederickshamm -	- 22½ 15	Suenoÿa	-	-	- 22		14½
Kouxis	- 16 10 3	Pampola	-	-	- 18	•••	12
Puterlace	- 18 12	Lindolla	-	-	- 20		13
Ursala	- 16 10 ³	Bulostrof	-	-	- 18	•••	12
Villiouxis	- 23 15½	Drasnicof	-	-	- 15		10
Tevrouxis -	- 17 11½	Petersburg	-	-	- 25	•••	16 1
Wibourg -	- 20 13		T	otal -	- 293		195 <u>}</u>

ADDITION to the Note in p. 467, from Dr. Thomson's Travels.

When Dr. Thomson visited Sweden, Norway had not been annexed to that Country

LONDON

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